

## Structure Search

=&gt; FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 13:07:51 ON 21 MAY 2008

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FILE COVERS 1907 - 21 May 2008 VOL 148 ISS 21

FILE LAST UPDATED: 20 May 2008 (20080520/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

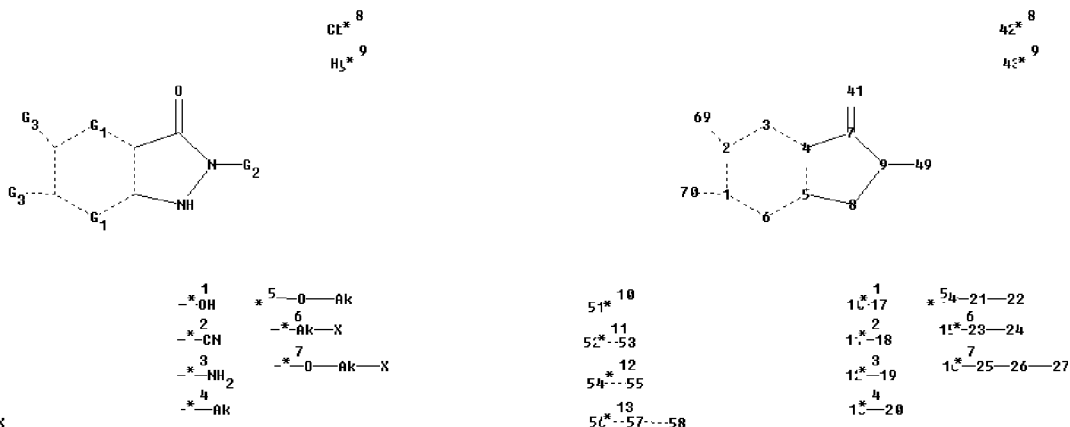
=&gt; D QUE L5

L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation:

Uploading strE.str



# Serial No.:11/880,002

```

chain nodes :
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 41 42 43
49 51 52 53 54 55 56 57 58 69 70
ring nodes :
1 2 3 4 5 6 7 8 9
chain bonds :
1-70 2-69 7-41 9-49 10-17 11-18 12-19 13-20 14-21 15-23 16-25 21-22 23-
24
25-26 26-27 52-53 54-55 56-57 57-58
ring bonds :
1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-8 7-9 8-9
exact/norm bonds :
1-2 1-6 1-70 2-3 2-69 3-4 4-5 4-7 5-6 5-8 7-9 7-41 8-9 9-49 10-17
11-18 12-19 13-20 14-21 15-23 16-25 21-22 23-24 25-26 26-27 52-53 54-55
56-57 57-58
isolated ring systems :
containing 1 :

```

G1:N,CH2,CH, [\*1], [\*2], [\*3], [\*4], [\*5], [\*6], [\*7]

G2:[\*8], [\*9]

G3:H,OH,CN,N,X, [\*8], [\*9], [\*10], [\*11], [\*12], [\*13]

```

Connectivity :
20:1 E exact RC ring/chain 22:1 E exact RC ring/chain 23:2 E exact RC ring/chain
26:2 E exact RC ring/chain 51:1 E exact RC ring/chain 53:1 E exact RC ring/chain
54:2 E exact
RC ring/chain 57:2 E exact RC ring/chain
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
19:CLASS 20:CLASS
21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 41:CLASS
42:Atom 43:Atom
49:CLASS 51:CLASS 52:CLASS 53:CLASS 54:CLASS 55:CLASS 56:CLASS 57:CLASS
58:CLASS 69:CLASS
70:CLASS
Generic attributes :
42:
Saturation : Unsaturated
Type of Ring System : Monocyclic

```

Element Count :  
Node 20: Limited  
C,C1-4

Node 22: Limited  
C,C1-4

Node 23: Limited  
C,C1-4

Node 26: Limited  
C,C1-4

Node 42: Limited  
C,C6

Node 43: Limited  
N,N1-3

Node 51: Limited  
C,C1-4

Node 53: Limited  
C,C1-4

Node 54: Limited  
C,C1-4

Node 57: Limited  
C,C1-4

L3 248 SEA FILE=REGISTRY SSS FUL L1  
L4 144 SEA FILE=HCAPLUS ABB=ON PLU=ON L3  
L5 133 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 AND (PRY<=2003 OR  
AY<=2003 OR PY<=2003)

=> D IBIB ED ABS HITSTR L5 1-133

L5 ANSWER 1 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2005:472147 HCAPLUS Full-text  
DOCUMENT NUMBER: 143:26598  
TITLE: Indazol-3-ones and analogs and derivatives which  
modulate the function of the vanilloid-1 receptor  
(VR1)  
INVENTOR(S): Burkamp, Frank; Fletcher, Stephen Robert  
PATENT ASSIGNEE(S): Merck Sharp & Dohme Limited, UK  
SOURCE: PCT Int. Appl., 28 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005049601	A1	20050602	WO 2004-GB4809	20041112 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,				
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,				
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,				
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,				
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,				
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,				
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,				
SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,				
NE, SN, TD, TG				
AU 2004290624	A1	20050602	AU 2004-290624	20041112 <--
CA 2545710	A1	20050602	CA 2004-2545710	20041112 <--
EP 1687293	A1	20060809	EP 2004-798529	20041112 <--
EP 1687293	B1	20070926		

Serial No.:11/880,002

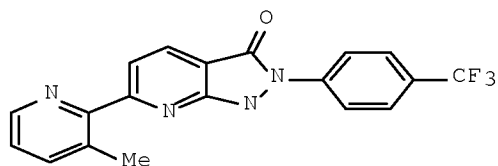
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS

CN 1882564	A	20061220	CN 2004-80033693	20041112 <--
JP 2007511495	T	20070510	JP 2006-538958	20041112 <--
AT 374195	T	20071015	AT 2004-798529	20041112 <--
ES 2291958	T3	20080301	ES 2004-798529	20041112 <--
US 20070129374	A1	20070607	US 2006-579355	20060511 <--
IN 2006DN02932	A	20070803	IN 2006-DN2932	20060522 <--
PRIORITY APPLN. INFO.:			GB 2003-26633	A 20031114 <--
			WO 2004-GB4809	W 20041112

OTHER SOURCE(S): CASREACT 143:26598; MARPAT 143:26598

ED Entered STN: 03 Jun 2005

GI



I

AB The title compds., which are useful as therapeutic compds., particularly in the treatment of pain and other conditions ameliorated by the modulation of the function of the vanilloid-1 receptor (VR1) are prepared E.g. I was prepared In vitro activity of I and similar compds. was determined in CHO cells, stably expressing recombinant human VR1 receptors. Increases in intracellular Ca<sup>2+</sup> occurring after addition of test compound alone, prior to addition of capsaicin, allow determination of intrinsic agonist or partial agonist activity.

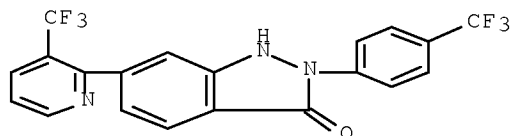
IT 852620-72-5P 852620-74-7P 852620-76-9P  
852620-77-0P 852620-78-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indazol-3-ones for treatment of pain, inflammation and physiol. disorders ameliorated by the modulation of the function of the vanilloid-1 receptor (VR1))

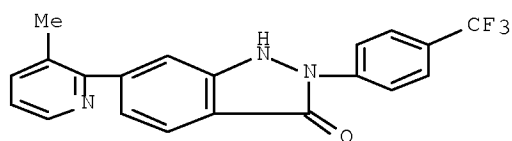
RN 852620-72-5 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-[4-(trifluoromethyl)phenyl]-6-[3-(trifluoromethyl)-2-pyridinyl]- (CA INDEX NAME)



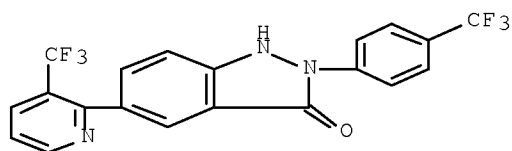
RN 852620-74-7 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-6-(3-methyl-2-pyridinyl)-2-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



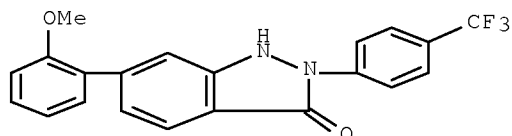
RN 852620-76-9 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-[4-(trifluoromethyl)phenyl]-5-[3-(trifluoromethyl)-2-pyridinyl]- (CA INDEX NAME)



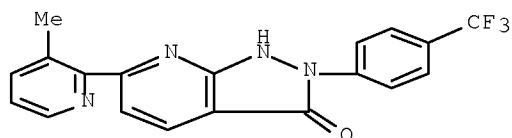
RN 852620-77-0 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-6-(2-methoxyphenyl)-2-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



RN 852620-78-1 HCAPLUS

CN 3H-Pyrazolo[3,4-b]pyridin-3-one, 1,2-dihydro-6-(3-methyl-2-pyridinyl)-2-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



IT 852620-82-7P

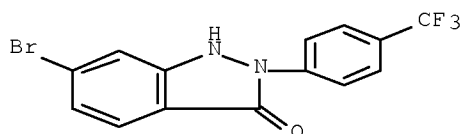
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of indazol-3-ones for treatment of pain, inflammation and physiol. disorders ameliorated by the modulation of the function of the

vanilloid-1 receptor (VR1))

RN 852620-82-7 HCAPLUS

CN 3H-Indazol-3-one, 6-bromo-1,2-dihydro-2-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:981361 HCAPLUS Full-text

DOCUMENT NUMBER: 142:198064

TITLE: Process for preparation of 3-chloro-2-(4-chloro-2-fluoro-5-hydroxyphenyl)-4,5,6,7-tetrahydro-2h-indazole

INVENTOR(S): Jun, Dong Ju; Kim, Hyeong Rae; Park, Gwan Yong; Song, Jong Hwan; Yoo, Eung Geol

PATENT ASSIGNEE(S): Korea Research Institute of Chemical Technology, S. Korea

SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given  
CODEN: KRXXA7

DOCUMENT TYPE: Patent

LANGUAGE: Korean

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2003095677	A	20031224	KR 2002-33207	20020614 <--
PRIORITY APPLN. INFO.:			KR 2002-33207	20020614 <--

ED Entered STN: 17 Nov 2004

AB A process for preparing 3-chloro-2-(4-chloro-2-fluoro-5-hydroxyphenyl)-4,5,6,7-tetrahydro-2H-indazole is provided, thereby improving its preparation yield and converting byproducts of the preparation into starting material. A process for preparing 3-chloro-2-(4-chloro-2-fluoro-5-hydroxyphenyl)-4,5,6,7-tetrahydro-2H-indazole of the formula 1 comprises the steps of: reacting 2-(2-fluoro-4-chloro-5-hydroxyphenyl)-2,3a,4,5,6,7-hexahydroindazole-3-one of the formula 2 with phosgene; concentrating the phosgene reaction mixture under reduced pressure; dissolving the concentrate in an organic solvent; adding ammonia water or hydroxide solution to the organic solvent and filtering solids; and distilling the filtered solution, wherein the organic solvent is Et acetate; the addition of ammonia water or hydroxide solution is carried out at room temperature; the solids are mainly constituted of a compound of the formula 2, and the byproducts of the reaction include a dimer represented by the formula 3a, 3b or 3c.

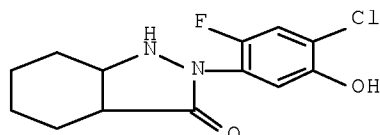
IT 122855-12-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of chloro(chlorofluorohydroxyphenyl)tetrahydroindazole)

RN 122855-12-3 HCAPLUS

CN 3H-Indazol-3-one, 2-(4-chloro-2-fluoro-5-hydroxyphenyl)octahydro- (CA INDEX NAME)



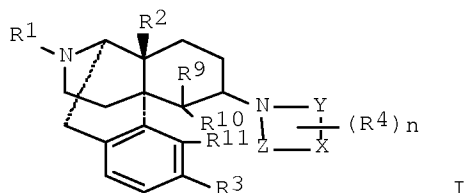
L5 ANSWER 3 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2004:333718 HCAPLUS Full-text  
 DOCUMENT NUMBER: 140:339518  
 TITLE: Preparation of morphinan derivatives having  
 nitrogen-containing heterocyclic group as remedies or  
 prophylactic agents for urinary frequency or urinary  
 incontinence  
 INVENTOR(S): Izumimoto, Naoki; Kawai, Koji; Kawamura, Kuniaki;  
 Fujimura, Morihiro; Komagata, Toshikazu  
 PATENT ASSIGNEE(S): Toray Industries, Inc., Japan  
 SOURCE: PCT Int. Appl., 202 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004033457	A1	20040422	WO 2003-JP12890	20031008 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2501389	A1	20040422	CA 2003-2501389	20031008 <--
AU 2003272944	A1	20040504	AU 2003-272944	20031008 <--
EP 1555266	A1	20050720	EP 2003-754030	20031008 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003014754	A	20050726	BR 2003-14754	20031008 <--
CN 1703415	A	20051130	CN 2003-80100971	20031008 <--
JP 4016986	B2	20071205	JP 2004-542845	20031008 <--
IN 2005KN00466	A	20070105	IN 2005-KN466	20050321 <--
ZA 2005002650	A	20060628	ZA 2005-2650	20050401 <--
US 20060040970	A1	20060223	US 2005-530664	20050406 <--
US 7320984	B2	20080122		
MX 2005PA03723	A	20050930	MX 2005-PA3723	20050407 <--
NO 2005002167	A	20050616	NO 2005-2167	20050503 <--
JP 2007224039	A	20070906	JP 2007-106935	20070416 <--
JP 2008044938	A	20080228	JP 2007-195352	20070727 <--
JP 2008074853	A	20080403	JP 2007-254155	20070928 <--
PRIORITY APPLN. INFO.:			JP 2002-295616	A 20021009 <--
			JP 2004-542845	A3 20031008 <--

OTHER SOURCE(S): MARPAT 140:339518

ED Entered STN: 23 Apr 2004

GI



AB Title compds. I [wherein R1 represents Me, cyclopropylmethyl, etc.; R2 and R3 represent each hydroxy, methoxy, acetoxy, etc.; Y and Z represent each a valence bond, CO, etc.; X represents a C2-5 carbon chain constituting a part of the cyclic structure (wherein one of the carbon atoms may be substituted by oxygen, sulfur or nitrogen); (R4)<sub>n</sub> represents an optionally substituted fused benzene ring, carbonyl, etc.; R9 represents hydrogen, etc.; R10 and R11 may be bonded together to form O; and R6 represents hydrogen, etc.] and their pharmacol. acceptable salts, useful as remedy or a prophylactic agents for urinary frequency or urinary incontinence, are prepared Thus, refluxing dihydrocodeinone with 1,2,3,4-tetrahydroquinoline in xylene-DMF in the presence of methanesulfonic acid gave, after treatment with sodium cyanohydride and methanesulfonic acid in methanol at room temperature for 24 h, 33% 4,5 $\alpha$ -epoxy-6 $\beta$ -tetrahydroquinolino-3- methoxy-17-methylmorphinan (II). II was converted to 4,5 $\alpha$ -epoxy- 6 $\beta$ -tetrahydroquinolino-17-methylmorphinan-3-ol tartrate (III) in 75% yield. III showed urinary contraction inhibitory activity at 0.1 mg/kg i.v. in rats.

IT 681032-41-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of morphinan derivs. having nitrogen-containing heterocyclic group as remedies or prophylactic agents for urinary frequency or urinary incontinence)

RN 681032-41-7 HCAPLUS

CN 3H-Indazol-3-one, 2-[(5 $\alpha$ ,6 $\beta$ )-17-(cyclopropylmethyl)-4,5-epoxy-3,14-dihydroxymorphinan-6-yl]-1,2-dihydro-, (2R,3R)-2,3-dihydroxybutanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

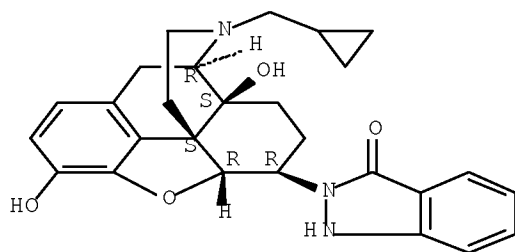
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CRN 681032-40-6

CMF C27 H29 N3 O4

Absolute stereochemistry.



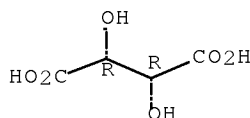


CM 2

CRN 87-69-4

CMF C4 H6 O6

Absolute stereochemistry.



IT 681032-40-6P

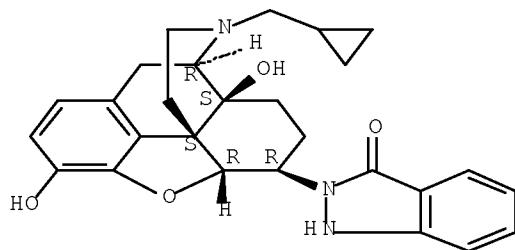
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);  
BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);  
USES (Uses)

(preparation of morphinan derivs. having nitrogen-containing heterocyclic  
group  
as remedies or prophylactic agents for urinary frequency or urinary  
incontinence)

RN 681032-40-6 HCAPLUS

CN 3H-Indazol-3-one, 2-[(5 $\alpha$ ,6 $\beta$ )-17-(cyclopropylmethyl)-4,5-epoxy-  
3,14-dihydroxymorphinan-6-yl]-1,2-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

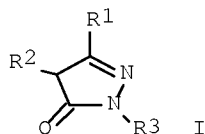
5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2003:777767 HCAPLUS Full-text  
 DOCUMENT NUMBER: 139:286349  
 TITLE: Medicine for prevention and/or therapy of  
 cardiomyopathy  
 INVENTOR(S): Hayashi, Tetsuya  
 PATENT ASSIGNEE(S): Mitsubishi Pharma Corporation, Japan  
 SOURCE: PCT Int. Appl., 28 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003080583	A1	20031002	WO 2003-JP3813	20030327 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003227257	A1	20031008	AU 2003-227257	20030327 <--
PRIORITY APPLN. INFO.:			JP 2002-87499	A 20020327 <--
			WO 2003-JP3813	W 20030327 <--

OTHER SOURCE(S): MARPAT 139:286349  
 ED Entered STN: 03 Oct 2003  
 GI



AB A medicine for prevention and/or therapy of cardiomyopathy, which comprises, as an active constituent, a pyrazolone derivative represented by the following formula I (R1 = H, aryl, alkyl or alkoxyacarbonyl-alkyl group, and R2 = H, aryloxy, aryl-mercapto, alkyl or hydroxyalkyl group, or R1, R2 = alkylene group, and R3 = H, alkyl, cycloalkyl, hydroxyalkyl, benzyl, naphthyl, Ph group, or a Ph group substituted with the same or different one to three substituents selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, alkoxyacarbonyl, alkyl-mercapto, alkylamino, dialkylamino, halogen atom, trifluoromethyl, carboxyl, cyano, hydroxyl, nitro, amino and acetamido group), or a pharmaceutically acceptable salt thereof.

IT 70972-70-2

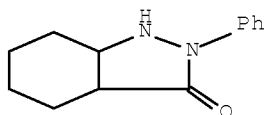
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(medicine for prevention and/or therapy of cardiomyopathy)

RN 70972-70-2 HCAPLUS

CN 3H-Indazol-3-one, octahydro-2-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:757683 HCAPLUS Full-text

DOCUMENT NUMBER: 139:261293

TITLE: Preventive and/or therapeutic agent for hypoxic ischemic brain disorder

INVENTOR(S): Ikeda, Tomoaki; Ikenoue, Tsuyomu

PATENT ASSIGNEE(S): Mitsubishi Pharma Corporation, Japan

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003078401	A1	20030925	WO 2003-JP3067	20030314 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, CA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2005343789	A	20051215	JP 2002-71595	20020315 <--
AU 2003213364	A1	20030929	AU 2003-213364	20030314 <--
PRIORITY APPLN. INFO.:			JP 2002-71595	A 20020315 <--
			WO 2003-JP3067	W 20030314 <--

OTHER SOURCE(S): MARPAT 139:261293

ED Entered STN: 26 Sep 2003

AB The patent relates to a medicine for use in the prevention of and/or treatments for hypoxic ischemic brain disorders, especially ones of newborns caused by labor. It contains as an active ingredient a substance selected from the group consisting of 3-methyl-1-phenyl-2-pyrazolin-5-one, pyralozone derivs. which are analogs thereof, physiolo. acceptable salts thereof, and any hydrates and any solvates of these. Thus, 1-phenyl-3-methyl-2-pyrazolin-5-one prepared by refluxing Et acetoacetate with phenylhydrazine in ethanol and recrystn. was dissolved in simulated body fluid and showed effect on hypoxic ischemic brain of new born rat.

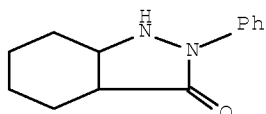
IT 70972-70-2

Serial No.:11/880,002

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(pyrazolinone derivative for preventive and/or therapeutic agent for  
hypoxic ischemic brain disorder)

RN 70972-70-2 HCAPLUS

CN 3H-Indazol-3-one, octahydro-2-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:868631 HCAPLUS Full-text

DOCUMENT NUMBER: 138:137685

TITLE: Preliminary study of the non-emissive thermal  
rearrangement of novel N-cyanates to rigid rod  
polymers

AUTHOR(S): Hay, John N.; Martin, Philip S.; Bird, Clive W.;  
Hormozi, Neda

CORPORATE SOURCE: Department of Chemistry, University of Surrey, Surrey,  
GU2 7XH, UK

SOURCE: Polymer International (2002), 51(10),  
1031-1036

CODEN: PLYIEI; ISSN: 0959-8103

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 15 Nov 2002

AB Novel materials, both monomeric and polymeric, were synthesized to study the  
non-emissive thermal rearrangement of N-cyanates. These materials undergo an  
exothermic rearrangement, at temps. in the range of 150-300°, to fused  
heterocyclic products. The series of N-cyanate polymeric materials was  
characterized by FTIR and modulated DSC as a preliminary assessment of their  
use as processable precursors to rigid rod polymers.

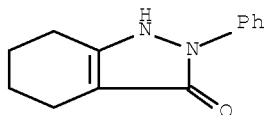
IT 62221-94-7F

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(non-emissive thermal rearrangement of N-cyanates to rigid rod  
polymers)

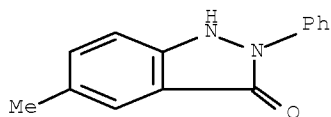
RN 62221-94-7 HCAPLUS

CN 3H-Indazol-3-one, 1,2,4,5,6,7-hexahydro-2-phenyl- (CA INDEX NAME)

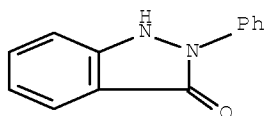


REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2002:855866 HCAPLUS Full-text  
 DOCUMENT NUMBER: 139:214345  
 TITLE: Product class 2: 1H- and 2H-indazoles  
 AUTHOR(S): Stadlbauer, W.  
 CORPORATE SOURCE: Institut fur Organische Chemie, Karl-Franzens-  
 Universitat, Graz, A-8010, Austria  
 SOURCE: Science of Synthesis (2002), 12, 227-324  
 CODEN: SSCYJ9  
 PUBLISHER: Georg Thieme Verlag  
 DOCUMENT TYPE: Journal; General Review  
 LANGUAGE: English  
 ED Entered STN: 12 Nov 2002  
 AB A review of methods for preparation of 1H- and 2H-indazoles. Covered  
 reactions include ring-closure reactions, ring transformations, and  
 substituent modifications.  
 IT 17049-62-6P 17049-65-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of 1H- and 2H-indazoles via ring-closure reactions, ring  
 transformations, and substituent modifications)  
 RN 17049-62-6 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-5-methyl-2-phenyl- (CA INDEX NAME)



RN 17049-65-9 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)

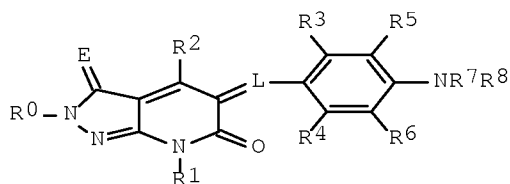


REFERENCE COUNT: 664 THERE ARE 664 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2002:447150 HCAPLUS Full-text  
 DOCUMENT NUMBER: 137:39273  
 TITLE: Silver halide color print material containing solid  
 dye dispersions for motion picture  
 INVENTOR(S): Tanemura, Hatsumi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 70 pp.

DOCUMENT TYPE: CODEN: JKXXAF  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: 1 Japanese  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002169254	A	20020614	JP 2000-364911	20001130 <--
PRIORITY APPLN. INFO.:			JP 2000-364911	20001130 <--
OTHER SOURCE(S):	MARPAT	137:39273		
ED Entered STN:	14 Jun	2002		
GI				



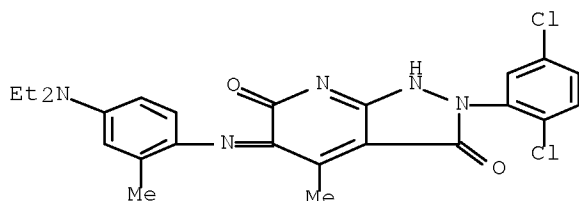
AB The material comprises nonphotosensitive hydrophilic colloid layer(s) and  $\geq 1$  blue-, green-, and red-sensitive emulsion layer on a transparent support, contg Ag halide grains with AgCl content  $\geq 90$  mol% and dispersion of solid dye I (L = N, group linked with 1, 3, 5, or 7 (substituted) methine through conjugated double bond; E = O, S, NR<sub>9</sub>; R<sub>0</sub>, R<sub>9</sub> = H, alkyl, alkenyl, alkynyl, aryl, heterocycle, amino, hydrazino, diazenyl; R<sub>1</sub> = H, alkyl, aryl, alkenyl, alkynyl, heterocycle; R<sub>2</sub> = H, halo, CN, NO<sub>2</sub>, OH, CO<sub>2</sub>H, alkyl, aryl, alkenyl, heterocycle, alkoxy, aryloxy, alkoxycarbonyl, aryloxycarbonyl, amino, acyloxy, carbamoyl, sulfamoyl, alkylthio, arylthio, alkylsulfonyl, arylsulfonyl, alkynyl; R<sub>0</sub> and R<sub>9</sub> may form a ring; R<sub>3</sub>, R<sub>4</sub> = H, halo, alkoxy, alkyl, alkenyl, aryloxy, aryl; R<sub>5</sub>, R<sub>6</sub> = H, substituent; R<sub>7</sub>, R<sub>8</sub> = alkyl, aryl, vinyl, acyl, alkyl- or aryl-sulfonyl; R<sub>3</sub> and R<sub>5</sub>, R<sub>4</sub> and R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub>, R<sub>5</sub> and R<sub>7</sub>, and R<sub>6</sub> and R<sub>8</sub> may form a ring). It showed improved antihalation and handling properties under safelight, storage stability, sharpness, and high speed processing properties.

IT 137079-55-1P

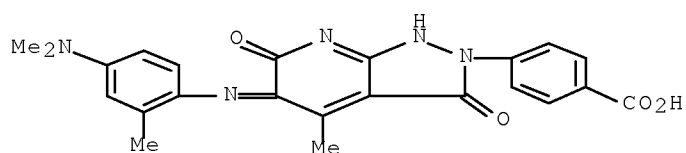
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (cinephotog. film containing dye solid dispersion)

RN 137079-55-1 HCAPLUS

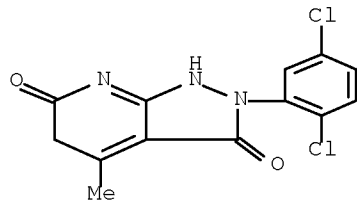
CN 2H-Pyrazolo[3,4-b]pyridine-3,6(5H,7H)-dione, 2-(2,5-dichlorophenyl)-5-[[4-(diethylamino)-2-methylphenyl]imino]-4-methyl- (9CI) (CA INDEX NAME)



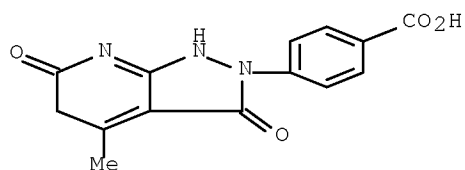
IT 163073-35-6  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (cinephotog. film containing dye solid dispersion)  
 RN 163073-35-6 HCAPLUS  
 CN Benzoic acid, 4-[5-[[4-(dimethylamino)-2-methylphenyl]imino]-1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]- (CA INDEX NAME)



IT 137079-59-5P  
 RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);  
 RACT (Reactant or reagent)  
 (preparation of dye)  
 RN 137079-59-5 HCAPLUS  
 CN 2H-Pyrazolo[3,4-b]pyridine-3,6(5H,7H)-dione, 2-(2,5-dichlorophenyl)-4-methyl- (9CI) (CA INDEX NAME)



IT 190380-26-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of dye)  
 RN 190380-26-8 HCAPLUS  
 CN Benzoic acid, 4-(1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl)- (CA INDEX NAME)

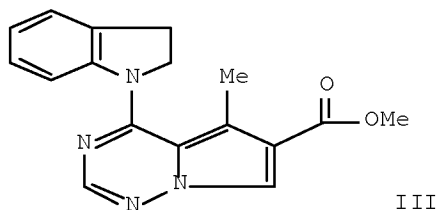
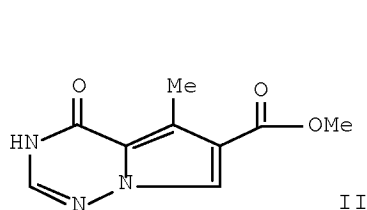
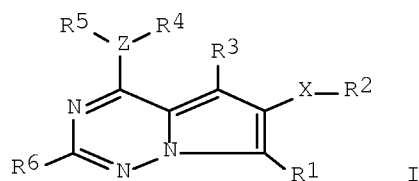


# Serial No.:11/880,002

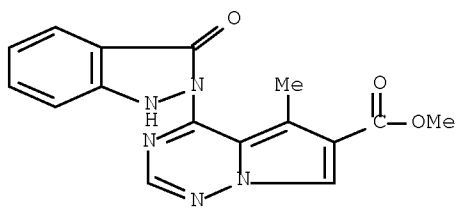
L5 ANSWER 9 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2002:391720 HCAPLUS Full-text  
 DOCUMENT NUMBER: 136:386144  
 TITLE: Preparation of pyrrolo[2,1-f][1,2,4]triazine  
 carboxylic acid derivatives for use in treating p38  
 kinase-associated conditions  
 INVENTOR(S): Leftheris, Katerina; Barrish, Joel; Hynes, John;  
 Wrobleski, Stephen T.  
 PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA  
 SOURCE: PCT Int. Appl., 108 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002040486	A2	20020523	WO 2001-US49982	20011107 <--
WO 2002040486	A3	20030912		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2429628	A1	20020523	CA 2001-2429628	20011107 <--
AU 2002032760	A	20020527	AU 2002-32760	20011107 <--
EE 200300227	A	20031015	EE 2003-227	20011107 <--
EP 1363910	A2	20031126	EP 2001-992298	20011107 <--
EP 1363910	B1	20060301		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
HU 2003003897	A2	20040301	HU 2003-3897	20011107 <--
JP 2004522713	T	20040729	JP 2002-543494	20011107 <--
CN 1622946	A	20050601	CN 2001-818997	20011107 <--
NZ 525334	A	20050729	NZ 2001-525334	20011107 <--
BR 2001015446	A	20050809	BR 2001-15446	20011107 <--
AT 318820	T	20060315	AT 2001-992298	20011107 <--
PT 1363910	T	20060531	PT 2001-992298	20011107 <--
ES 2259051	T3	20060916	ES 2001-992298	20011107 <--
RU 2316556	C2	20080210	RU 2003-117799	20011107 <--
BG 107750	A	20040130	BG 2003-107750	20030421 <--
IN 2003MN00471	A	20050304	IN 2003-MN471	20030502 <--
MX 2003PA04290	A	20040212	MX 2003-PA4290	20030515 <--
ZA 2003003786	A	20040816	ZA 2003-3786	20030515 <--
NO 2003002229	A	20030716	NO 2003-2229	20030516 <--
HK 1057555	A1	20060915	HK 2004-100424	20040119 <--
PRIORITY APPLN. INFO.:			US 2000-249877P	P 20001117 <--
			US 2001-310561P	P 20010807 <--
			WO 2001-US49982	W 20011107 <--
OTHER SOURCE(S): MARPAT 136:386144				
ED Entered STN: 24 May 2002				
GI				

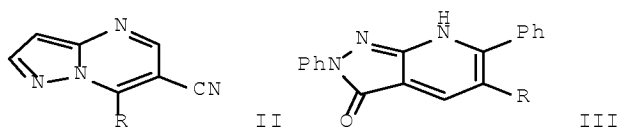




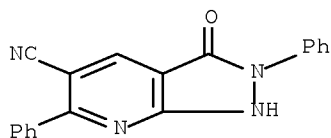
- AB Title compds. I [R3 = H, Me, perfluoromethyl, MeO, halo, cyano, NH2; X = O, OC(O), S, S(O), SO2, C(O), CO2, amino, aminoacyl, etc. or X is absent; Z = O, S, N, and CR20, wherein when Z = CR20 said carbon atom may form an (un)(un)substituted bicyclic aryl or heteroaryl with R4 and R5; R1 = H, CH3, OH, OCH3, SH, SCH3, acyloxy, etc.; R2 = H, alkyl, alkenyl, aryl, heteroaryl, etc.; R4 = (un)substituted aryl, heteroaryl, bicyclic 7-11 membered (un)saturated carbocyclic or heterocyclic ring; R5 = H, alkyl, etc. or alternatively, R4 and R5 taken together with Z form an (un)substituted bicyclic 7-11 membered aryl or heteroaryl; R6 = H, alkyl, aryl, heterocyclo, etc.; R20 = H, alkyl, etc. with some provisions] were prepared Over 150 compds. were disclosed. For instance, 1-Amino-3-methylpyrrole- 2,4-dicarboxylic acid di-Me ester was prepared from the parent pyrrole (preparation given) and diphenylphosphorylhydroxylamine and reacted with formamide (165°C, 6 h) to give intermediate pyrrolo[2,1- f][1,2,4]triazine II in 90% yield. II was converted to the imino-chloride (POCl3) and treated with indoline to give example compound III. I are inhibitors of p38 kinase and are useful for the treatment of inflammatory disorders.
- IT 310443-16-4P, 4-[2,3-Dihydro-3-oxo-1H-indazol-2-yl]-5-methylpyrrolo[2,1-f][1,2,4]triazine-6-carboxylic acid methyl ester  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (drug; preparation of pyrrolo[2,1-f][1,2,4]triazine carboxylic acid derivs. for use in treating p38 kinase-associated conditions)
- RN 310443-16-4 HCAPLUS
- CN Pyrrolo[2,1-f][1,2,4]triazine-6-carboxylic acid, 4-(1,3-dihydro-3-oxo-2H-indazol-2-yl)-5-methyl-, methyl ester (CA INDEX NAME)



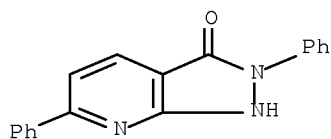
L5 ANSWER 10 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2001:633844 HCAPLUS Full-text  
 DOCUMENT NUMBER: 135:357894  
 TITLE: Synthesis of new pyrazolo[1,5-a]pyrimidines and  
 pyrazolo[3,4-b]pyridines  
 AUTHOR(S): Al-Mousawi, Saleh M.; Mohammad, Mohammad A.; Elnagdi,  
 Mohamad H.  
 CORPORATE SOURCE: Department of Chemistry, Faculty of Science,  
 University of Kuwait, Safat, 13060, Kuwait  
 SOURCE: Journal of Heterocyclic Chemistry (2001),  
 38(4), 989-991  
 CODEN: JHTCAD; ISSN: 0022-152X  
 PUBLISHER: HeteroCorporation  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 135:357894  
 ED Entered STN: 31 Aug 2001  
 GI



AB While 3(5)-aminopyrazole reacts with enaminonitrile RR1C:CHNMe2 (I, R = cyano,  
 R1 = PhCO, cyano) to yield pyrazolo[1,5-a]pyrimidines II, 3-amino-5-  
 pyrazolone reacts with the same reagents, I (R = cyano, H, R1 = PhCO) to yield  
 pyrazolo[3,4-b]pyridines III (R = cyano, H).  
 IT 373385-54-7P 373385-55-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of pyrazolopyrimidines and pyrazolopyridines by cycloaddn. of  
 pyrazoles with enaminones and enaminonitriles)  
 RN 373385-54-7 HCAPLUS  
 CN 1H-Pyrazolo[3,4-b]pyridine-5-carbonitrile, 2,3-dihydro-3-oxo-2,6-diphenyl-  
 (CA INDEX NAME)



RN 373385-55-8 HCAPLUS  
 CN 3H-Pyrazolo[3,4-b]pyridin-3-one, 1,2-dihydro-2,6-diphenyl- (CA INDEX NAME)

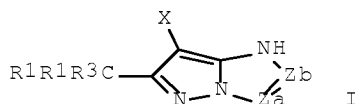


REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 11 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 2001:414657 HCAPLUS Full-text  
 DOCUMENT NUMBER: 135:26820  
 TITLE: Silver halide color photographic material for movies  
 INVENTOR(S): Sakai, Shuichi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 68 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001154318	A	20010608	JP 1999-334982	19991125 <--
CN 1298122	A	20010606	CN 2000-132552	20001127 <--
US 6558885	B1	20030506	US 2000-721660	20001127 <--
US 20040023170	A1	20040205	US 2003-385504	20030312 <--
US 6852478	B2	20050208		
PRIORITY APPLN. INFO.:			JP 1999-334982	A 19991125 <--
			JP 2000-92148	A 20000329 <--
			US 2000-721660	A3 20001127 <--

OTHER SOURCE(S): MARPAT 135:26820  
 ED Entered STN: 08 Jun 2001  
 GI



AB The photog. material has  $\geq 1$  magenta emulsion layer containing  $\geq 1$  pyrazotriazole-type coupler as a magenta dye former represented by I (Za, Zb = :CR4-, :N-; R1-4 = H, substituents; X = H, groups which is released by coupling reaction with oxidized developer), and the Ag halide emulsion of the magenta emulsion layer comprises  $\geq 98$  mol% AgCl. The photog. material has  $\geq 1$  nonphotosensitive hydrophilic colloidal layer containing dispersed solid dye microparticles represented by D-Xy (d = compound residue having coloring group; X = releasable H, group having releasable H; y = 1-7), and the magenta emulsion layer is placed farthest from the colloidal layer. The photog. material has high color reproducibility and is stably developed.

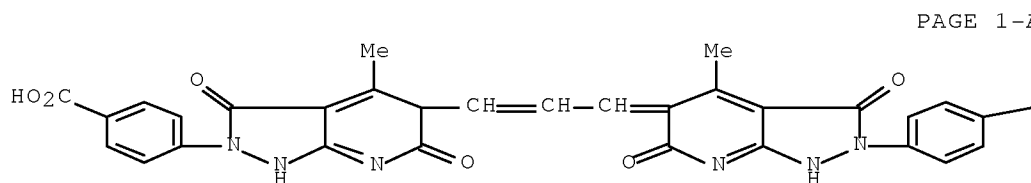
IT 172839-14-4

RL: DEV (Device component use); USES (Uses)

(silver halide photog. material containing pyrazotriazole-type magenta coupler and solid dye microparticle for high color reproducibility for movie)

RN 172839-14-4 HCAPLUS

CN Benzoic acid, 4-[5-[3-[2-(4-carboxyphenyl)-1,2,3,6-tetrahydro-4-methyl-3,6-dioxo-5H-pyrazolo[3,4-b]pyridin-5-ylidene]-1-propenyl]-1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]- (9CI) (CA INDEX NAME)



PAGE 1-B

—CO<sub>2</sub>H

L5 ANSWER 12 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:841986 HCAPLUS Full-text

DOCUMENT NUMBER: 134:17506

TITLE: Preparation of pyrrolotriazines as kinases inhibitors for treating inflammation, cancer, and proliferative diseases

INVENTOR(S): Hunt, John T.; Bhide, Rajeev S.; Borzilleri, Robert M.; Qian, Ligang

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 130 pp.

CODEN: PIXXD2

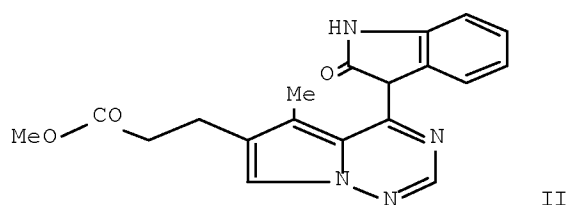
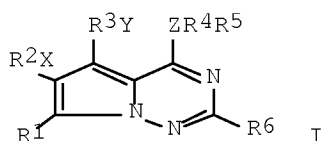
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000071129	A1	20001130	WO 2000-US13420	20000516 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2373990	A1	20001130	CA 2000-2373990	20000516 <--
CA 2373990	C	20070508		
EP 1183033	A1	20020306	EP 2000-930761	20000516 <--
EP 1183033	B1	20060301		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY				
BR 2000010482	A	20020423	BR 2000-10482	20000516 <--
JP 2003500359	T	20030107	JP 2000-619433	20000516 <--
HU 2003001005	A2	20030728	HU 2003-1005	20000516 <--
HU 2003001005	A3	20060529		
NZ 516292	A	20040130	NZ 2000-516292	20000516 <--
AU 770377	B2	20040219	AU 2000-48524	20000516 <--
TR 200103352	T2	20050321	TR 2001-3352	20000516 <--
AT 318603	T	20060315	AT 2000-930761	20000516 <--
EP 1669071	A1	20060614	EP 2006-3602	20000516 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
ES 2258459	T3	20060901	ES 2000-930761	20000516 <--
TW 238163	B	20050821	TW 2000-89109521	20000518 <--
US 6982265	B1	20060103	US 2000-573829	20000518 <--
IN 2001MN01414	A	20050304	IN 2001-MN1414	20011113 <--
MX 2001PA11832	A	20020621	MX 2001-PA11832	20011119 <--
NO 2001005650	A	20011120	NO 2001-5650	20011120 <--
NO 322214	B1	20060828		
ZA 2001009577	A	20030220	ZA 2001-9577	20011120 <--
HK 1041599	A1	20060915	HK 2002-103297	20020502 <--
US 20060004007	A1	20060105	US 2005-190412	20050727 <--
US 7112675	B2	20060926		
US 20060128709	A1	20060615	US 2006-345845	20060202 <--
US 7244733	B2	20070717		
PRIORITY APPLN. INFO.:			US 1999-135265P	P 19990521 <--
			US 2000-193727P	P 20000331 <--
			EP 2000-930761	A3 20000516 <--
			WO 2000-US13420	W 20000516 <--
			US 2000-573829	A3 20000518 <--
			US 2005-190412	A3 20050727
OTHER SOURCE(S): MARPAT 134:17506				
ED Entered STN: 01 Dec 2000				
GI				

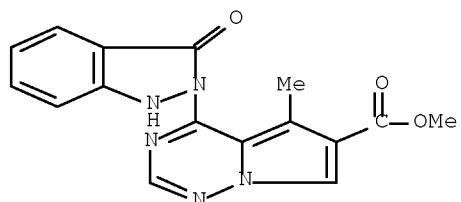


AB Title compds. [I; X, Y independently = O, OCO, S, SO, SO<sub>2</sub>, CO, CO<sub>2</sub>, NH, NHCO, NHCONH, bond; Z = O, S, N, CH; R<sub>1</sub> = H, CH<sub>3</sub>, OH, OCH<sub>3</sub>, SH, SCH<sub>3</sub>, NH<sub>2</sub>, CO<sub>2</sub>H, NO<sub>2</sub>, CN, halo; R<sub>2</sub>, R<sub>3</sub> independently = H, alkyl, alkenyl, alkynyl, aryl, heterocyclo; R<sub>4</sub>, R<sub>5</sub> independently = H, alkyl, aryl, heterocyclo; R<sub>4</sub>-R<sub>5</sub> = monocyclic 5-7 membered cyclic ring, bicyclic 7-11 membered cyclic ring; R<sub>6</sub> = H, alkyl, aryl, heterocyclo, halo], enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs, carriers, and solvates, which inhibit the tyrosine kinase activity of growth factor receptors such as VEGFR-2, FGFR-1, PDGFR, HER-1, HER-2 and produce antiangiogenic effect, are prepared Title compds. I are useful as anti-cancer agents, antiinflammatories and agents for the treatment of diseases associated with signal transduction pathways operating through growth factor receptors. Thus, the title compound II was prepared

IT 310443-16-4P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of pyrrolotriazines as kinases inhibitors useful in treating inflammation, cancer, and proliferative diseases)

RN 310443-16-4 HCAPLUS

CN Pyrrolo[2,1-f][1,2,4]triazine-6-carboxylic acid, 4-(1,3-dihydro-3-oxo-2H-indazol-2-yl)-5-methyl-, methyl ester (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 13 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

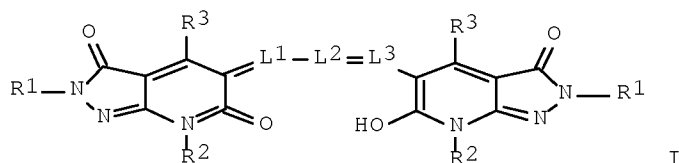
ACCESSION NUMBER: 2000:205746 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 132:258203

TITLE: Photothermographic material containing dye to be

decolored on heating  
 INVENTOR(S): Kamosaki, Toru  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 32 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000089414	A	20000331	JP 1998-252946	19980907 <--
PRIORITY APPLN. INFO.:			JP 1998-252946	19980907 <--
OTHER SOURCE(S):	MARPAT	132:258203		
ED Entered STN:	31 Mar	2000		
GI				



AB The material comprises photog. layers containing photosensitive Ag halide grains, a color developer (or its precursor), a coupler, and a binder and  $\geq 1$  Ag-containing light insensitive layer contains a conjugated methine dye I ( $R_1$  = H, alkyl, aryl, heterocycle;  $R_2$  = H, alkyl, aryl, heterocycle,  $CO_2R_4$ ,  $SO_2R_4$ ;  $R_3$  = H, cyano, OH, COOH, alkyl, aryl,  $CO_2R_4$ ,  $OR_4$ ,  $NR_5R_6$ ,  $CONR_5R_6$ ,  $NR_5COR_4$ ,  $NR_5SO_2R_4$ ,  $NR_5CONR_5R_6$ ;  $R_4$  = alkyl, aryl;  $R_5$ ,  $R_6$  = H, alkyl, aryl;  $L_1$ ,  $L_2$ ,  $L_3$  = methine), which is decolored by reacting with a discoloring agent on heating. The material having the decoloring dye in antihalation layer, etc., shows improved color separation and sharpness after storage.

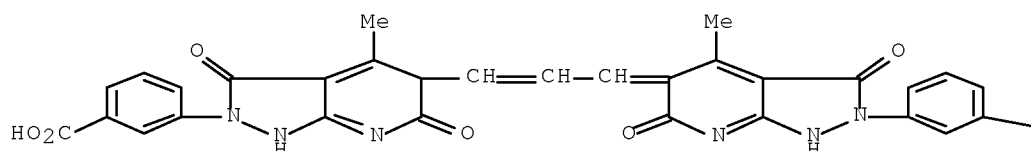
IT 262360-67-8 262360-69-0

RL: TEM (Technical or engineered material use); USES (Uses)  
 (photothermog. material involving nonphotosensitive layer containing conjugated methine dye to be decolored on heating)

RN 262360-67-8 HCAPLUS

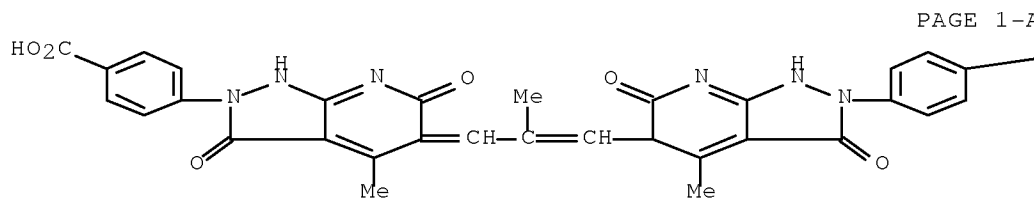
CN Benzoic acid, 3-[5-[3-[2-(3-carboxyphenyl)-1,2,3,6-tetrahydro-4-methyl-3,6-dioxo-5H-pyrazolo[3,4-b]pyridin-5-ylidene]-1-propenyl]-1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A



—CO<sub>2</sub>H

RN 262360-69-0 HCAPLUS  
 CN Benzoic acid, 4-[5-[3-[2-(4-carboxyphenyl)-1,2,3,6-tetrahydro-4-methyl-3,6-dioxo-5H-pyrazolo[3,4-b]pyridin-5-ylidene]-2-methyl-1-propenyl]-1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]- (9CI) (CA INDEX NAME)

—CO<sub>2</sub>H

L5 ANSWER 14 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1999:768118 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 132:92965  
 TITLE: Electron ionization mass spectrometric studies of 1,2-dihydro-2-[2'-pyridyl, 4'-pyridyl and 2',6'-pyrimidyl]-3H-indazol-3-ones  
 AUTHOR(S): Raza, Abdul R.; Rama, Nasim H.; Rehman, I.  
 CORPORATE SOURCE: Department of Chemistry, Quaid-i-Azam University, Islamabad, 45320, Pak.  
 SOURCE: Journal of the Chemical Society of Pakistan ( 1999), 21(1), 65-68  
 CODEN: JCSPDF; ISSN: 0253-5106  
 PUBLISHER: Chemical Society of Pakistan  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ED Entered STN: 06 Dec 1999  
 AB Electron-ionization mass spectra (EIMS) of 1,2-dihydro-2-(2-pyridyl-, -4-pyridyl and -2,6-pyrimidyl)-3H-indazol-3-ones and their related 2-nitrobenzamides are described. The mol. formulas are further confirmed by high-resolution EIMS matching of mol.-ion peaks.  
 IT 74152-92-4, 3H-Indazol-3-one, 1,2-dihydro-2-(2-pyridinyl)-  
 255044-14-5, 1,2-Dihydro-2-(4-pyridinyl)-3H-indazol-3-one



Serial No.:11/880,002

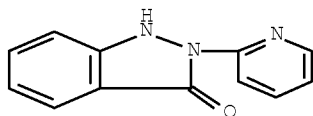
255044-15-6, 1,2-Dihydro-2-(2-pyrimidinyl)-3H-indazol-3-one

RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)

(electron-ionization mass spectrometric studies of dihydropyridyl- and -pyrimidylindazolones and related nitrobenzamides)

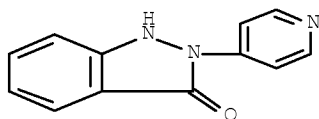
RN 74152-92-4 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-(2-pyridinyl)- (CA INDEX NAME)



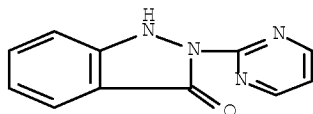
RN 255044-14-5 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-(4-pyridinyl)- (CA INDEX NAME)



RN 255044-15-6 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-(2-pyrimidinyl)- (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 15 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:768115 HCAPLUS Full-text

DOCUMENT NUMBER: 132:92964

TITLE: Electron ionization mass spectrometric studies of 1,2-dihydro-2-[2-(1,3-benzothiazolyl)]-3H-indazol-3-one and 1,2-dihydro-2-(3,4-dimethylphenyl)-6,7-dimethoxy-3H-indazol-3-one

AUTHOR(S): Raza, Abdul R.; Rama, Nasim H.; Rehman, I.

CORPORATE SOURCE: Department of Chemistry, Quaid-i-Azam University, Islamabad, 45320, Pak.

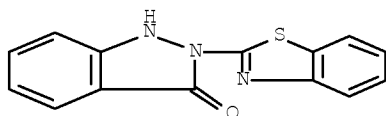
SOURCE: Journal of the Chemical Society of Pakistan (1999), 21(1), 52-56

CODEN: JCSPDF; ISSN: 0253-5106

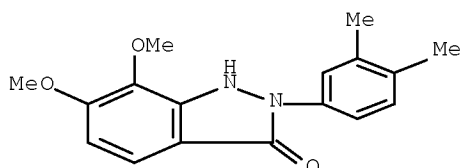
PUBLISHER: Chemical Society of Pakistan

DOCUMENT TYPE: Journal

LANGUAGE: English  
 ED Entered STN: 06 Dec 1999  
 AB Electron-ionization mass spectra of the title compds. and their related compds. 2,3,4-N3R2C6H2CONHR1 (R = H, MeO; R1 = 1,3-benzothiazol-2-yl, 3,4-xylyl) are described using low-resolution electron-impact mass spectrometry (EIMS). The mol. formulas are further confirmed by high-resolution peak matching of mol.-ion peaks exhibited by EIMS.  
 IT 175653-66-4, 3H-Indazol-3-one, 2-(2-benzothiazolyl)-1,2-dihydro-  
 255044-20-3, 2-(3,4-Dimethylphenyl)-1,2-dihydro-6,7-dimethoxy-3H-indazol-3-one  
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
 (electron-ionization mass spectra of dihydro(benzothiazolyl)- and -dimethoxy(dimethylphenyl)indazolones and related azidobenzamides)  
 RN 175653-66-4 HCAPLUS  
 CN 3H-Indazol-3-one, 2-(2-benzothiazolyl)-1,2-dihydro- (CA INDEX NAME)



RN 255044-20-3 HCAPLUS  
 CN 3H-Indazol-3-one, 2-(3,4-dimethylphenyl)-1,2-dihydro-6,7-dimethoxy- (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 16 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1999:753648 HCAPLUS Full-text  
 DOCUMENT NUMBER: 132:151725  
 TITLE: New synthesis of pyrazolo[3,4-b]pyridines  
 AUTHOR(S): Youssef, A. M. S.  
 CORPORATE SOURCE: Chemistry Department, Faculty of Science, University of Cairo, Giza, Egypt  
 SOURCE: Egyptian Journal of Chemistry (1999), 42(3), 293-300  
 CODEN: EGJCA3; ISSN: 0449-2285  
 PUBLISHER: National Information and Documentation Centre  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 132:151725  
 ED Entered STN: 28 Nov 1999

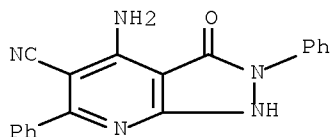
Serial No.:11/880,002

AB Reaction of 3-amino-4,5-dihydro-1-phenyl-5-pyrazolone with ArCH:CRCN [Ar = Ph, 4-ClC<sub>6</sub>H<sub>4</sub>, 4-MeOC<sub>6</sub>H<sub>4</sub>, R = CN, CSNH<sub>2</sub>, CO<sub>2</sub>Et, Bz] gave pyrazolo[3,4-b]pyridinecarbonitriles.

IT 257872-98-3P 257872-99-4P 257873-00-0P  
257873-01-1P 257873-02-2P 257873-03-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of pyrazolo[3,4-b]pyridinecarbonitriles)

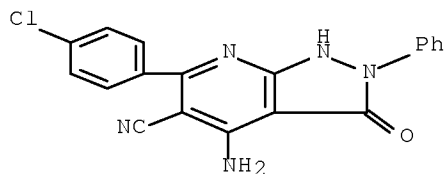
RN 257872-98-3 HCAPLUS

CN 1H-Pyrazolo[3,4-b]pyridine-5-carbonitrile, 4-amino-2,3-dihydro-3-oxo-2,6-diphenyl- (CA INDEX NAME)



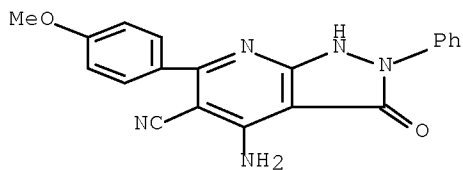
RN 257872-99-4 HCAPLUS

CN 1H-Pyrazolo[3,4-b]pyridine-5-carbonitrile, 4-amino-6-(4-chlorophenyl)-2,3-dihydro-3-oxo-2-phenyl- (CA INDEX NAME)



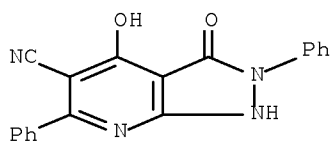
RN 257873-00-0 HCAPLUS

CN 1H-Pyrazolo[3,4-b]pyridine-5-carbonitrile, 4-amino-2,3-dihydro-6-(4-methoxyphenyl)-3-oxo-2-phenyl- (CA INDEX NAME)



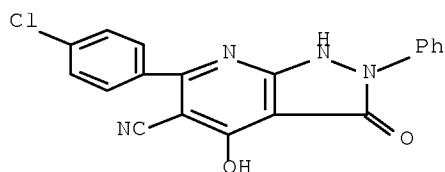
RN 257873-01-1 HCAPLUS

CN 1H-Pyrazolo[3,4-b]pyridine-5-carbonitrile, 2,3-dihydro-4-hydroxy-3-oxo-2,6-diphenyl- (CA INDEX NAME)



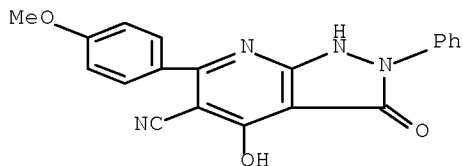
RN 257873-02-2 HCAPLUS

CN 1H-Pyrazolo[3,4-b]pyridine-5-carbonitrile, 6-(4-chlorophenyl)-2,3-dihydro-4-hydroxy-3-oxo-2-phenyl- (CA INDEX NAME)



RN 257873-03-3 HCAPLUS

CN 1H-Pyrazolo[3,4-b]pyridine-5-carbonitrile, 2,3-dihydro-4-hydroxy-6-(4-methoxyphenyl)-3-oxo-2-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 17 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:713496 HCAPLUS Full-text

DOCUMENT NUMBER: 131:329824

TITLE: Dye crystals, their manufacture, crystalline dyes, dispersions of dye solid fine particles, and silver halide photographic materials

INVENTOR(S): Fujiwara, Yoshinori; Inoue, Rikio

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

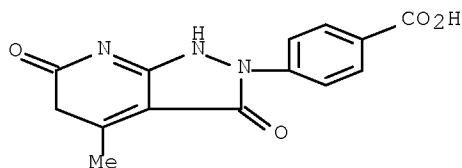
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

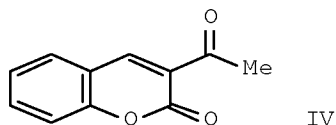
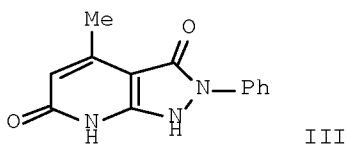
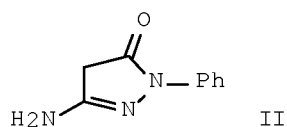
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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Serial No.:11/880,002

JP 11310727 A 19991109 JP 1998-134675 19980428 <--  
 PRIORITY APPLN. INFO.: JP 1998-134675 19980428 <--  
 ED Entered STN: 09 Nov 1999  
 AB The dye crystals containing crystal solvents are manufactured by dissolving dyes in solvents and depositing the dyes from the solvents. The crystalline dyes contain crystal solvents. The dispersions are obtained by dispersing the dye crystals in the crystal solvents or other liqs. The photog. materials contain the dye crystals. The dyes show good dispersibility and high stability.  
 IT 190380-26-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (manufacture of crystal solvent-containing dyes with good dispersibility for photog. materials)  
 RN 190380-26-8 HCAPLUS  
 CN Benzoic acid, 4-(1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl)- (CA INDEX NAME)



L5 ANSWER 18 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1999:161986 HCAPLUS Full-text  
 DOCUMENT NUMBER: 130:296634  
 TITLE: Microwave-mediated derivatization of poly(styrene-co-allyl alcohol), a key step for the soluble polymer-assisted synthesis of heterocycles  
 AUTHOR(S): Vanden Eynde, Jean Jacques; Rutot, Delphine  
 CORPORATE SOURCE: Organic Chemistry Department, University of Mons-Hainaut, Mons, B - 7000, Belg.  
 SOURCE: Tetrahedron (1999), 55(9), 2687-2694  
 CODEN: TETRAB; ISSN: 0040-4020  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 130:296634  
 ED Entered STN: 12 Mar 1999  
 GI



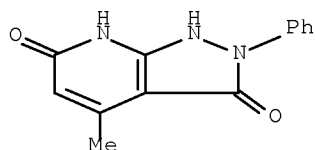
AB Poly(styrene-co-allyl alc.) can be readily esterified under classical conditions or under microwave irradiation with  $\beta$ -keto esters, Et aminobutanoate, and dihydropyridine- and pyridinedicarboxylate esters to form soluble polymer-bound intermediates in the preparation of nitrogen and oxygen heterocycles. E.g., the copolymer of styrene and allyl alc. and Et 3-oxobutanoate were heated for 10 min. at 400W in a microwave oven to give MeCOCH<sub>2</sub>COOP I (P = styrene-allyl alc. copolymer) on up to 10g scale. E.g., I and aminophenylpyrazolone II were dissolved in acetic acid and heated under reflux for 4h to give pyrazolopyridinedione III in 65% yield based on free hydroxy groups in the poly(co-styrene-allyl alc.) and the O-acetylated copolymer of styrene and allyl alc., which was saponified with sodium hydroxide to give poly(styrene-co-allyl alc.) in 60% yield. E.g., I and 2-HOC<sub>6</sub>H<sub>4</sub>CHO in ethanol were heated under reflux in the presence of piperidine and acetic acid to give coumarin IV. The recycling of the polymeric auxiliary and its use in combinatorial chemical are discussed.

IT 71290-80-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of heterocycles by cyclocondensation of polymer bound  $\beta$ -keto esters and aminobutanoate with aminopyrazole or hydroxybenzaldehyde)

RN 71290-80-7 HCAPLUS

CN 1H-Pyrazolo[3,4-b]pyridine-3,6(2H,7H)-dione, 4-methyl-2-phenyl- (CA INDEX NAME)



REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 19 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:572286 HCAPLUS Full-text

DOCUMENT NUMBER: 129:199315

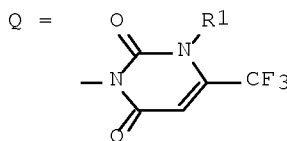
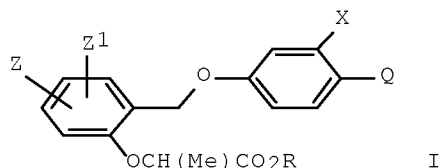
TITLE: Preparation of herbicidal 2-[(4-heterocyclylphenoxy)methyl]phenoxy]alkanoates

INVENTOR(S): Theodoridis, George

PATENT ASSIGNEE(S): USA  
 SOURCE: U.S., 27 pp., Cont.-in-part of U.S. 5,674,810.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5798316	A	19980825	US 1997-865306	19970529 <--
US 5262390	A	19931116	US 1992-935601	19920826 <--
US 5344812	A	19940906	US 1993-107560	19930817 <--
US 5674810	A	19971007	US 1995-523991	19950905 <--
PRIORITY APPLN. INFO.:			US 1992-935601	A2 19920826 <--
			US 1993-107560	A2 19930817 <--
			US 1995-523991	A2 19950905 <--

OTHER SOURCE(S): MARPAT 129:199315  
 ED Entered STN: 08 Sep 1998  
 GI



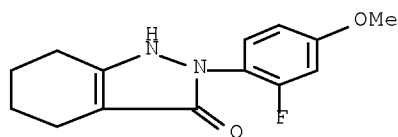
AB Herbicidal 2-[(4-heterocyclylphenoxy)methyl]phenoxy]alkanoates, optionally in combination with other herbicides, are disclosed. The herbicidal 2-[(4-heterocyclylphenoxy)methyl]phenoxy]alkanoates are I [R = H, (un)substituted lower alkyl, cycloalkyl, lower alkenyl or lower alkynyl, Na, K, NH<sub>4</sub>, etc.; R<sub>1</sub> = lower alkyl, lower haloalkyl, lower cyanoalkyl, lower alkoxyalkyl, lower alkoxyalkyl, lower alkoxyalkyl, lower arylalkyl or amino; X = H, Me, F or Cl; Z = H, F, Cl, Br, lower alkyl or methoxy; Z<sub>1</sub> = H, F or Cl; ZZ<sub>1</sub> = (CH<sub>2</sub>)<sub>4</sub>; m = 0, 1, 2; n = 1-6]. I are both pre- and postemergent herbicides. The preparation of I is given. I can be used with either grass-controlling or broadleaf herbicides.

IT 188359-70-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (intermediate in preparation of phenoxyethylphenoxyalkanoate derivative herbicides)

RN 188359-70-8 HCAPLUS

CN 3H-Indazol-3-one, 2-(2-fluoro-4-methoxyphenyl)-1,2,4,5,6,7-hexahydro- (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 20 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:474277 HCAPLUS Full-text

DOCUMENT NUMBER: 129:189303

TITLE: Orthoamides. Part 51. Push-pull butadienes and heterocycles from alkynecarboxylic acid orthoamides and CH<sub>2</sub>-acidic compounds

AUTHOR(S): Kantlehner, Willi; Vettel, Markus; Lehmann, Hansjoerg; Edelmann, Kai; Stieglitz, Ruediger; Ivanov, Ivo C.

CORPORATE SOURCE: Institut Organische Chemie Isotopenforschung, Universitaet Stuttgart, Stuttgart, D-70569, Germany

SOURCE: Journal fuer Praktische Chemie/Chemiker-Zeitung (1998), 340(5), 408-423

CODEN: JPCCEM; ISSN: 0941-1216

PUBLISHER: Johann Ambrosius Barth

DOCUMENT TYPE: Journal

LANGUAGE: German

OTHER SOURCE(S): CASREACT 129:189303

ED Entered STN: 30 Jul 1998

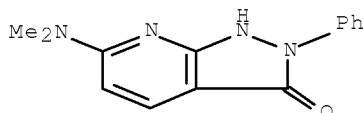
AB RC.tplbond.CNa (R = MeOCH<sub>2</sub>, 4-ClC<sub>6</sub>H<sub>4</sub>) reacts with (Me<sub>2</sub>N)<sub>3</sub>CCl to give the resp. orthoamides RC.tplbond.CC(NMe<sub>2</sub>)<sub>3</sub> (I). From CH<sub>2</sub>-acidic compds. and I [R = H, CMeOMe(CH<sub>2</sub>)<sub>2</sub>CH: CMe<sub>2</sub>, Ph] push-pull-substituted butadienes, such as R<sub>2</sub>R<sub>1</sub>C:CRCH: C(NMe<sub>2</sub>)<sub>2</sub> (R<sub>1</sub> = CN; R<sub>2</sub> = Ph, CO<sub>2</sub>Me, CO<sub>2</sub>Et, CONH<sub>2</sub>, CONMe<sub>2</sub>, PhCO, 4-ClC<sub>6</sub>H<sub>4</sub>CO, 4-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>) are obtained. Enamines react with I to give pyridinamines. Analogously, by reaction of I with 6-aminouracil, 4- and 7-(dimethylamino)pyrido[2,3-d]pyrimidines are formed.

IT 211762-73-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of push-pull butadienes and N-heterocycles from alkynecarboxylic orthoamides and CH<sub>2</sub>-acidic compds.)

RN 211762-73-1 HCAPLUS

CN 3H-Pyrazolo[3,4-b]pyridin-3-one, 6-(dimethylamino)-1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 21 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:396968 HCAPLUS Full-text

DOCUMENT NUMBER: 129:122632

TITLE: Nonsteroidal antiinflammatory agents. Part 1: Antiinflammatory, analgesic and antipyretic activity of some new 1-(pyrimidin-2-yl)-3-pyrazolin-5-ones and 2-(pyrimidin-2-yl)-1,2,4,5,6,7-hexahydro-3H-indazol-3-ones

AUTHOR(S): Badawey, El-Sayed A. M.; El-Ashmawey, Ibrahim M.

CORPORATE SOURCE: Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Alexandria, Alexandria, Egypt

SOURCE: European Journal of Medicinal Chemistry (1998)



) , 33 (5) , 349-361

CODEN: EJMCA5; ISSN: 0223-5234

PUBLISHER: Editions Scientifiques et Medicales Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 29 Jun 1998

AB In our reinvestigation of the cyclocondensation reaction of aminoguanidine bicarbonate with 2-acetylbutyrolactone and Et cyclohexanone-2-carboxylate, we have obtained the resp. 1-amidino-3-pyrazolin-5-one derivative and 2-amidino-1,2,4,5,6,7-hexahydro-3H-indazol-3-one. These intermediates were utilized for the synthesis of two novel series of 1-(pyrimidin-2-yl)-3-pyrazolin-5-ones and 2-(pyrimidin-2-yl)-1,2,4,5,6,7-hexahydro-3H-indazol-3-ones. Selected analogs from both series (15 compds.) were evaluated for their antiinflammatory activity in an acute and subacute model of inflammation. The analgesic and antipyretic activity of the target compds. were also evaluated. A structure-activity relationship (SAR) comparative study indicated that some compds. from both series exhibited excellent antiinflammatory activity, together with good analgesic and antipyretic activity and were found to be more potent than the reference drugs at a dose of 50 mg/kg, po. In consideration of the efficacy of the compds. in these assays, three of the compds. were further studied at graded doses for their acute toxicity (ALD50) and ulcerogenic activity and were shown to have a large safety margin (ALD50 > 4.0 g/kg, po) and devoid of ulcerogenic potentialities when administered orally at a dose of 300 mg/kg.

IT 210417-26-8P 210417-28-0P 210417-29-1P

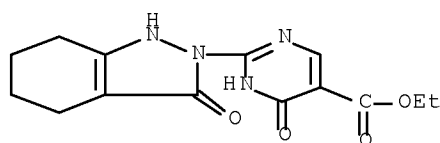
210417-30-4P 210417-33-7P 210417-35-9P

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antiinflammatory, analgesic, and antipyretic activity of pyrimidinylpyrazolinones and pyrimidinylhexahydroindazolones)

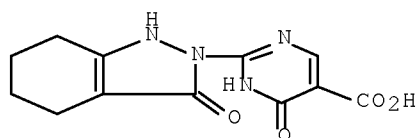
RN 210417-26-8 HCAPLUS

CN	5-Pyrimidinecarboxylic acid, 2-(1,3,4,5,6,7-hexahydro-3-oxo-2H-indazol-2-yl)-1,4-dihydro-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)
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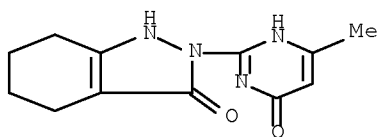
RN 210417-28-0 HCAPLUS

CN 5-Pyrimidinecarboxylic acid, 2-(1,3,4,5,6,7-hexahydro-3-oxo-2H-indazol-2-yl)-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



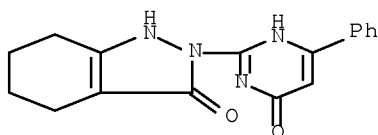
RN 210417-29-1 HCAPLUS

CN 3H-Indazol-3-one, 2-(1,4-dihydro-6-methyl-4-oxo-2-pyrimidinyl)-1,2,4,5,6,7-hexahydro- (9CI) (CA INDEX NAME)



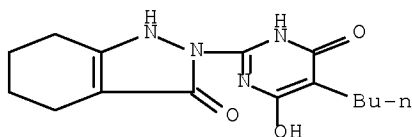
RN 210417-30-4 HCAPLUS

CN 3H-Indazol-3-one, 2-(1,4-dihydro-4-oxo-6-phenyl-2-pyrimidinyl)-1,2,4,5,6,7-hexahydro- (9CI) (CA INDEX NAME)



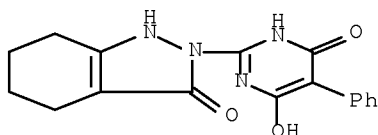
RN 210417-33-7 HCAPLUS

CN 3H-Indazol-3-one, 2-(5-butyl-1,4-dihydro-6-hydroxy-4-oxo-2-pyrimidinyl)-1,2,4,5,6,7-hexahydro- (9CI) (CA INDEX NAME)



RN 210417-35-9 HCAPLUS

CN 3H-Indazol-3-one, 2-(1,4-dihydro-6-hydroxy-4-oxo-5-phenyl-2-pyrimidinyl)-1,2,4,5,6,7-hexahydro- (9CI) (CA INDEX NAME)



IT 210417-27-9P 210417-31-5P 210417-32-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

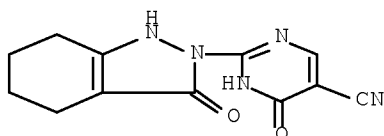
(preparation and antiinflammatory, analgesic, and antipyretic activity of

Serial No.:11/880,002

pyrimidinylpyrazolinones and pyrimidinylhexahydroindazolones)

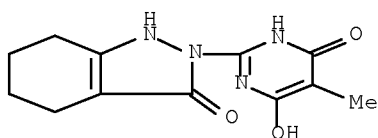
RN 210417-27-9 HCAPLUS

CN 5-Pyrimidinecarbonitrile, 2-(1,3,4,5,6,7-hexahydro-3-oxo-2H-indazol-2-yl)-  
1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)



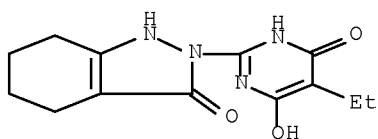
RN 210417-31-5 HCAPLUS

CN 3H-Indazol-3-one, 2-(1,4-dihydro-6-hydroxy-5-methyl-4-oxo-2-pyrimidinyl)-  
1,2,4,5,6,7-hexahydro- (9CI) (CA INDEX NAME)



RN 210417-32-6 HCAPLUS

CN 3H-Indazol-3-one, 2-(5-ethyl-1,4-dihydro-6-hydroxy-4-oxo-2-pyrimidinyl)-  
1,2,4,5,6,7-hexahydro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 22 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:133560 HCAPLUS Full-text

DOCUMENT NUMBER: 128:160936

TITLE: Oxonol compound, silver halide photographic material,  
and process for synthesis of oxonol compound

INVENTOR(S): Nishigaki, Junji; Deguchi, Yasuaki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 116 pp.

CODEN: EPXXDW

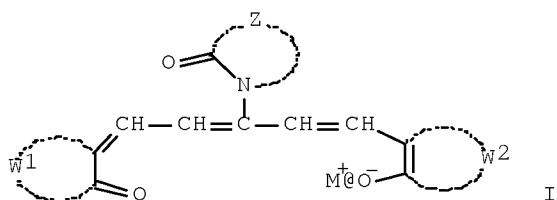
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 819977	A1	19980121	EP 1997-112271	19970717 <--
EP 819977	B1	20060104		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 10036691	A	19980210	JP 1996-206527	19960717 <--
JP 3846937	B2	20061115		
JP 10060293	A	19980303	JP 1996-235893	19960819 <--
JP 3796302	B2	20060712		
JP 10251532	A	19980922	JP 1997-55315	19970310 <--
EP 1473330	A1	20041103	EP 2004-18506	19970717 <--
EP 1473330	B1	20070214		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRIORITY APPLN. INFO.:			JP 1996-206527	A 19960717 <--
			JP 1996-235893	A 19960819 <--
			JP 1997-55315	A 19970310 <--
			EP 1997-112271	A3 19970717 <--
OTHER SOURCE(S): MARPAT 128:160936				
ED Entered STN: 06 Mar 1998				
GI				



AB An oxonol compound represented by the formula I, wherein each of Z, W1, and W2 independently is an atomic group that forms a heterocyclic ring and M<sup>+</sup> is a cation, is disclosed. A process for the synthesis of the oxonol compound and a silver halide photog. material containing the oxonol compound are also disclosed.

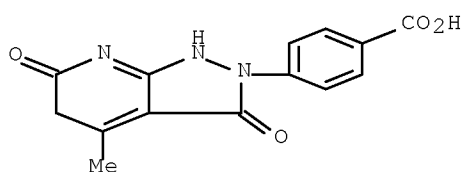
IT 190380-26-8

RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)

(reaction in preparing oxonol dye for silver halide photog. materials)

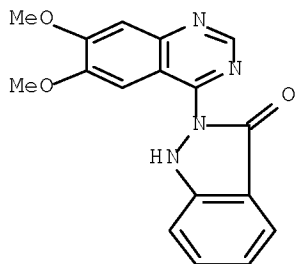
RN 190380-26-8 HCAPLUS

CN Benzoic acid, 4-(1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl)- (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 23 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1997:741244 HCAPLUS Full-text  
 DOCUMENT NUMBER: 128:70433  
 TITLE: Epidermal growth factor receptor tyrosine kinase: structure-activity relationships and antitumor activity of novel quinazolines  
 AUTHOR(S): Gibson, K. H.; Brundy, W.; Godfrey, A. A.; Woodburn, J. R.; Ashton, S. E.; Curry, B. J.; Scarlett, L.; Barker, A. J.; Brown, D. S.  
 CORPORATE SOURCE: Research Dep. Cancer, Metabolism and Endocrine, Zeneca Pharmaceuticals, Alderley Park, Macclesfield, Cheshire, SK10 4TG, UK  
 SOURCE: Bioorganic & Medicinal Chemistry Letters (1997), 7(21), 2723-2728  
 CODEN: BMCLE8; ISSN: 0960-894X  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ED Entered STN: 26 Nov 1997  
 AB Investigation of structure-activity relationships of novel quinazolines had identified a 4-(4-isoquinolylamino)-quinazoline and a 4-(trans-2-phenylcyclopropylamino)-quinazoline as potent inhibitors of EGF-receptor tyrosine kinase in vitro. Further modifications of the latter compound have identified a derivative which shows anti-tumor activity against a tumor xenograft model when doses orally once per day.  
 IT 200719-50-2P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (antitumor activity of EGF-receptor tyrosine kinase-inhibiting quinazolines)  
 RN 200719-50-2 HCAPLUS  
 CN 3H-Indazol-3-one, 2-(6,7-dimethoxy-4-quinazolinyl)-1,2-dihydro- (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 24 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

## Serial No.:11/880,002

ACCESSION NUMBER: 1997:396572 HCAPLUS Full-text  
DOCUMENT NUMBER: 127:42154  
TITLE: Silver halide photographic material containing  
pyrazolopyridone  
INVENTOR(S): Yabuki, Yoshiharu  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09106042	A	19970422	JP 1995-288105	19951011 <--
PRIORITY APPLN. INFO.:			JP 1995-288105	19951011 <--
OTHER SOURCE(S): MARPAT 127:42154				
ED Entered STN: 26 Jun 1997				
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

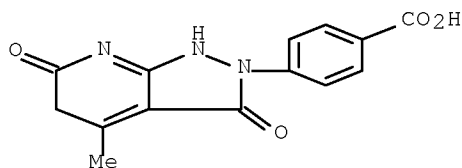
AB Claimed photog. material has a hydrophilic colloid layer containing  $\geq 1$  of solid dispersion of pyrazolopyridone dye I (L1, L2, L3 = methyne; E = O, S, NR9; R1, R9 = H, alkyl, alkenyl, aralkyl, aryl, heterocyclic ring; R2 = H, halo, cyano, nitro, OH, alkyl, aralkyl, aryl, alkenyl, heterocyclic ring, alkoxy, aryloxy, alkoxycarbonyl, aryloxycarbonyl, sulfamoyl, amino, acyloxy, carbamoyl, alkylsulfonyl, arylsulfonyl, alkynyl; R3 = H, alkyl, aryl, aralkyl, alkenyl, alkynyl, heterocyclic group; Q = II or III; R4 = H, alkyl, aralkyl, alkenyl; R5, R6 = H, halo, alkoxy, alkyl, acylamino, aryloxy, aryl; R7, R8 = H, substituent; R10 = H, alkyl, alkoxy, amino (cyclic amino); n = 0, 1). The dye works as antihalation, antiirradn. and/or filter dye and is non-diffusible before processing and is easily washed out during processing, leaving little residual stain in the photog. layers. Suitable dyes to be incorporated in a color neg. film are compound I (R1 = 4-carboxyphenyl; E = O; R2 = H; R3 = CH3; n = 0; L1 = CH; Q = 4-methoxyphenyl) and compound I (R1 = 4-carboxyphenyl; E = O; R2 = H; R3 = CH3; n = 1; L1-3 = CH; Q = 4-methoxyphenyl).

IT 190380-26-8

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with methoxybenzaldehyde; pyrazolopyridone dyes for  
photog. materials)

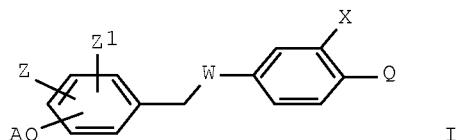
RN 190380-26-8 HCAPLUS

CN Benzoic acid, 4-(1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl)- (CA INDEX NAME)



L5 ANSWER 25 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1997:248022 HCAPLUS Full-text  
 DOCUMENT NUMBER: 126:221749  
 TITLE: Preparation of herbicidal 2-[(4-heterocyclic-  
 phoxymethyl)phenoxy]alkanoates  
 INVENTOR(S): Theodoridis, George  
 PATENT ASSIGNEE(S): FMC Corp., USA  
 SOURCE: PCT Int. Appl., 90 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

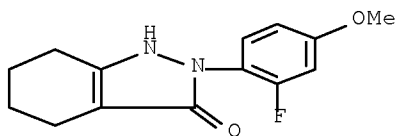
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9708953	A1	19970313	WO 1996-US14193	19960905 <--
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN				
US 5674810	A	19971007	US 1995-523991	19950905 <--
AU 9670140	A	19970327	AU 1996-70140	19960905 <--
ZA 9607511	A	19980227	ZA 1996-7511	19960905 <--
PRIORITY APPLN. INFO.:			US 1995-523991	A 19950905 <--
			WO 1996-US14193	W 19960905 <--
OTHER SOURCE(S): MARPAT 126:221749				
ED Entered STN: 17 Apr 1997				
GI				



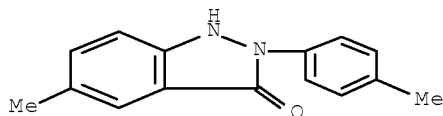
AB The title herbicidal compds. are I [A = alkanoate derivative bonded to the phenoxy O at the  $\alpha$ -C; Q = 4-difluoromethyl-4,5-dihydro-3-methyl-1,2,4-triazol-5(1H)-on-1-yl, 3,4,5,6-tetrahydrophthalimid-1-yl, 1-(1-methylethyl)imidazolidin-2,4-dion-3-yl, 1,4-dihydro-4-(3-fluoropropyl)-5H-tetrazol-5-on-1-yl, 3-chloro-4,5,6,7-tetrahydroindazol-2-yl, 4-methyl-1,2,4-triazine-3,5-dion-2-yl, 8-thia-1,6-diazabicyclo[4.3.0]nonane-7-on-9-ylimino or 1-methyl-6-trifluoromethyl-2,4-pyrimidinedione-3-yl; X = H, Me, F or Cl; W = O or S; Z = H, F, Cl, Br, lower alkyl, or methoxy; Z1 = H, F or Cl; AO may be in the 2-, 3-, or 4-position of the Ph ring].

IT 188359-70-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (intermediate in preparation of herbicidal heterocyclic phoxymethylphenoxyalkanoates)

RN 188359-70-8 HCAPLUS  
 CN 3H-Indazol-3-one, 2-(2-fluoro-4-methoxyphenyl)-1,2,4,5,6,7-hexahydro- (CA INDEX NAME)



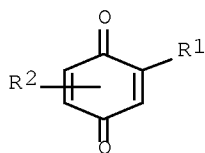
L5 ANSWER 26 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1997:78060 HCAPLUS Full-text  
 DOCUMENT NUMBER: 126:131435  
 TITLE: Carbonylation of nitro and azo compounds in the presence of iron carbonyl catalysts  
 AUTHOR(S): Lapidus, A. L.; Petrovsky, K. B.; Manov, Yuveny, V. I.  
 CORPORATE SOURCE: N. D. Zelinsky Inst. Organic Chem., Russian Academy Sciences, Moscow, 117913, Russia  
 SOURCE: Izvestiya Akademii Nauk, Seriya Khimicheskaya ( 1996), (10), 2460-2463  
 CODEN: IASKEA  
 PUBLISHER: Institut Organicheskoi Khimii im. N. D. Zelinskogo Rossiiskoi Akademii Nauk  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 ED Entered STN: 03 Feb 1997  
 AB Reactions of nitro and azo compds. with carbon monoxide are investigated in the presence of iron carbonyl catalysts. It was shown that these catalytic systems differ from Pd- and Rh-containing catalysts: in the Fe case, dimerization products are intermediates and azo compds. are products; in the Pd and Rh cases, no intermediate dimerization occurs, and the products are isocyanates and carbamates. The reaction of 4-nitrotoluene and azobenzene with CO in the presence of Fe(CO)<sub>5</sub>, giving 5-methyl-2-p- tolylindazolone, 1,2,3,4-tetrahydro-6-methyl-2,4-dioxo-3-p- tolylquinazoline, 4,4'-azotoluene, and p-toluidine, is studied. When catalysts PdCl<sub>2</sub> and Fe(CO)<sub>5</sub>/Al<sub>2</sub>O<sub>3</sub> are used together, an inhibition effect is found, especially in the presence of pyridine.  
 IT 17049-55-7P, 3H-Indazol-3-one, 1,2-dihydro-5-methyl-2-(4-methylphenyl)-  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (carbonylation of nitro and azo compds. in presence of iron carbonyl catalysts)  
 RN 17049-55-7 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-5-methyl-2-(4-methylphenyl)- (CA INDEX NAME)



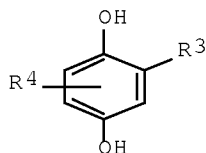


L5 ANSWER 27 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1997:48584 HCAPLUS Full-text  
 DOCUMENT NUMBER: 126:96807  
 TITLE: Silver halide photographic material with good storage  
 stability and processibility  
 INVENTOR(S): Sakai, Shuichi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 74 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08278597	A	19961022	JP 1995-108125	19950407 <--
PRIORITY APPLN. INFO.:			JP 1995-108125	19950407 <--
ED Entered STN: 23 Jan 1997				
GI				



I



II

AB In the title photog. material having  $\geq 3$  different color photosensitive layers each containing different a color coupler and Ag halide emulsion grains and  $\geq 1$  non-photosensitive hydrophilic colloid layer, the cyan coupler-containing layer contains a compound of I and II ( $R_1, R_3 = H, \text{alkyl, halo}$ ;  $R_2, R_4 = \text{alkyl, aryl, alkoxy, aryloxy, alkylthio, arylthio, amido, acyl, sulfonyl, alkoxy carbonyl, aryloxy carbonyl, carbamoyl, sulfamoyl, sulfoxide}$ ;  $R_2$  and  $R_4$  each contains  $\geq 6$  carbon), and the non-photosensitive hydrophilic colloid layer contains a fine particle dispersion of a dye D-(X)y ( $D = \text{residual of a compound containing coloring group}$ ;  $X = \text{dissociable H or it-containing group}$ ;  $y = 1-7$ ) prepared via a thermal treatment at  $\geq 40^\circ$ .

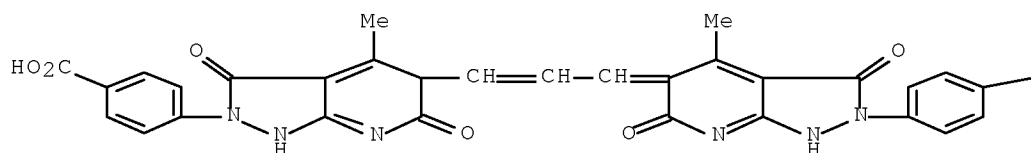
IT 172839-14-4

RL: DEV (Device component use); USES (Uses)

(contained in nonphotosensitive hydrophilic colloid layer for photog. material)

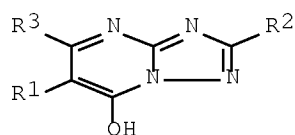
RN 172839-14-4 HCAPLUS

CN Benzoic acid, 4-[5-[3-[2-(4-carboxyphenyl)-1,2,3,6-tetrahydro-4-methyl-3,6-dioxo-5H-pyrazolo[3,4-b]pyridin-5-ylidene]-1-propenyl]-1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]- (9CI) (CA INDEX NAME)

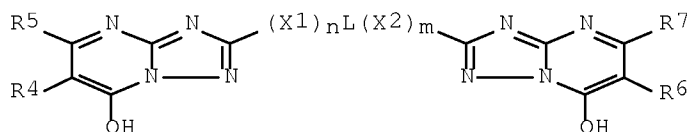


L5 ANSWER 28 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1996:543585 HCAPLUS Full-text  
 DOCUMENT NUMBER: 125:181144  
 TITLE: Silver halide photographic material containing  
 hydroxytetrazaindene derivative  
 INVENTOR(S): Suzuki, Keiichi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 51 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08146550	A	19960607	JP 1994-311265	19941122 <--
PRIORITY APPLN. INFO.:			JP 1994-311265	19941122 <--
ED Entered STN: 11 Sep 1996				
GI				



I



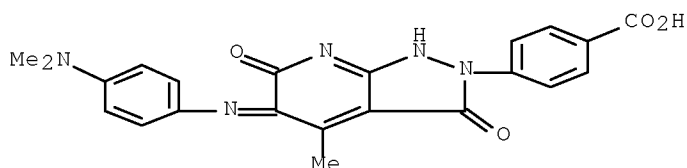
II

AB The material contains  $\geq 1$  hydrazine derivative R1NA1NA2G1R2 [R1 = aliphatic, aromatic; R2, R3 = H, alkyl, aryl, unsatd. heterocycle, alkoxy, aryloxy, amino, hydrazino; G1 = CO, SO2, SO, P(:O)R3, COCO, thiocarbonyl, iminomethylene; A1, A2 = H, (substituted) alkylsulfonyl, arylsulfonyl, acyl], a dye solid dispersion, and a hydroxytetrazaindene derivative I [R1 = halo, CN, CO2R, CONH2, CONHR, CON(R)2, SO2R, SO2NH2, SO2NHR, SO2N(R)2; R2 = H, alkyl, aryl, OR, SR, SeR; R3 = H, halo, alkyl, aryl; R = alkyl, aryl] or II (R4, R6 = R1; R5, R7 = R3; X1, X2 = O, S, Se; n, m = 0, 1; L = divalent organic acid residue). The solid dye may be D(X)y (D = coloring group; y = 1-7; D = dissociable H or the H-containing group). The material gives sharp photog. image and can be handled under the safelight.

IT 172839-10-0  
 RL: DEV (Device component use); USES (Uses)  
 (Ag halide photog. material containing hydroxytetrazaindene derivative for sharp neg. image)

RN 172839-10-0 HCAPLUS

CN Benzoic acid, 4-[5-[4-(dimethylamino)phenyl]imino]-1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]- (CA INDEX NAME)



L5 ANSWER 29 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:451675 HCAPLUS Full-text

DOCUMENT NUMBER: 125:100003

TITLE: Image formation method of silver halide photographic photoreceptor

INVENTOR(S): Suzuki, Keiichi; Hirano, Shigeo

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.  
 CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

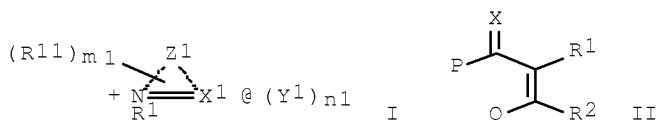
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08095208	A	19960412	JP 1994-256062	19940927 <--
PRIORITY APPLN. INFO.:			JP 1994-256062	19940927 <--

ED Entered STN: 31 Jul 1996

GI



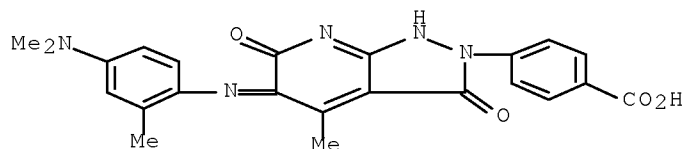
AB A photog. photoreceptor composed of a  $\geq 1$  photosensitive Ag halide emulsion layer formed on a support is exposed to light and developed, wherein (A) the Ag halide photoreceptor containing  $\geq 1$  compound shown as I ( $Z1$  = nonmetallic atom. group which is necessary for formation of 6-membered N-containing aromatic hetero ring with N and  $X1$ ;  $X1$  = N,  $CR12$ ,  $R12$  = same as  $R11$ ;  $R1$  = alkyl, alkenyl, alkynyl, aryl, hetero ring;  $R11$  = H, halo, substitution group which bond to ring via C, O, N, and S;  $m1$  = 0, integral number equal or less than the maximum possible substitution no; when  $m1$  are  $\geq 2$ ,  $R11$  may be same or different, maybe bonded to each other to form ring; 2 radicals, which are formed by loosing 1 H from I, may be bonded to form bis-type structure;  $Y1$  = ion pair for charge balance;  $n1$  = required number for charge balance) are contained in the emulsion layer and/or other hydrophilic colloidal layer, (B) a solid disperse dye are contained in the photoreceptor, and (C) the developer liquid containing a main agent are shown as II [ $P$ ,  $Q$  = OH, hydroxyalkyl, carboxyl, carboxyalkyl, sulfo, sulfoalkyl, amino, aminoalkyl, alkyl, alkoxy, mercapto;  $P$  and  $Q$  may be an atom. group which may be bonded to each other to form 5-7-membered ring with 2 vinyl C whose  $R1$  and  $R2$  are substituted and C whose Y is substituted; examples of the ring structures may be formed with O,  $CR4R5$ ,  $CR6$ ,  $C(:O)$ ,  $NR7$ ,  $N:$ ;  $R4-7$  = H, OH, carboxyl,  $C1-10$  alkyl which may be substituted with OH, carboxyl, sulfo].

IT 163073-35-6 172839-10-0

RL: TEM (Technical or engineered material use); USES (Uses)  
(solid disperse dye; image formation method of silver halide photog. photoreceptor)

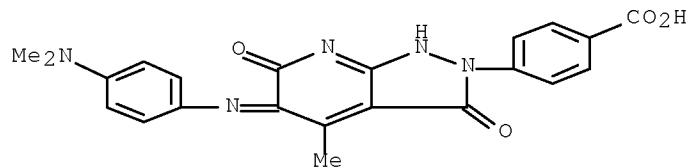
RN 163073-35-6 HCAPLUS

CN Benzoic acid, 4-[5-[[4-(dimethylamino)-2-methylphenyl]imino]-1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]- (CA INDEX NAME)



RN 172839-10-0 HCAPLUS

CN Benzoic acid, 4-[5-[[4-(dimethylamino)phenyl]imino]-1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]- (CA INDEX NAME)



Serial No.:11/880,002

ACCESSION NUMBER: 1996:214789 HCAPLUS Full-text  
DOCUMENT NUMBER: 124:274353  
TITLE: Dispersion of fine solid particles and method for  
producing the same  
INVENTOR(S): Nakanishi, Masatoshi; Saitoh, Yukoh; Fukuoka, Masahiro  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Eur. Pat. Appl., 67 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 694590	A1	19960131	EP 1995-111872	19950727 <--
EP 694590	B1	20011024		
R: DE, FR, GB, NL				
JP 08041370	A	19960213	JP 1994-193815	19940727 <--
JP 3388894	B2	20030324		
US 5726000	A	19980310	US 1997-854054	19970508 <--
PRIORITY APPLN. INFO.:			JP 1994-193815	A 19940727 <--
			US 1995-507841	B1 19950727 <--

OTHER SOURCE(S): MARPAT 124:274353

ED Entered STN: 16 Apr 1996

AB A dispersion of fine solid particles having good production suitability, good dispersion stability and high spectral absorption for use in preparing photog. films is obtained by pulverizing an aqueous slurry of a dye represented by general formula D(X)y (D represents a compound residue having a chromophore, X represents dissociative hydrogen or a group having dissociative hydrogen, and n is an integer of 1 to 7) in the presence of a polyalkylene oxide represented by general formula HO(CH<sub>2</sub>CH<sub>2</sub>O)<sub>a</sub>[CH<sub>2</sub>CH(CH<sub>3</sub>)O]<sub>b</sub>(CH<sub>2</sub>CH<sub>2</sub>O)<sub>a</sub>H or HO[CH<sub>2</sub>CH(CH<sub>3</sub>)O]<sub>b</sub>(CH<sub>2</sub>CH<sub>2</sub>O)<sub>a</sub>[CH<sub>2</sub>CH(CH<sub>3</sub>)O]<sub>b</sub> (a and b each represents a value of 5 to 500).

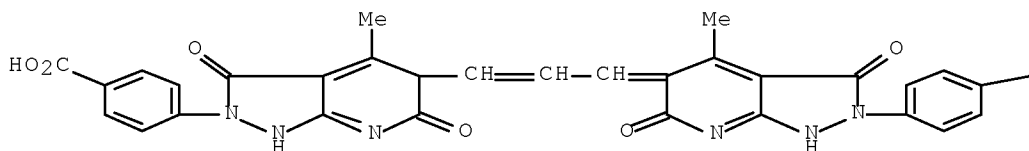
IT 172839-14-4

RL: TEM (Technical or engineered material use); USES (Uses)  
(photog. spectral dye dispersion containing polyalkylene oxide and)

RN 172839-14-4 HCAPLUS

CN Benzoic acid, 4-[5-[3-[2-(4-carboxyphenyl)-1,2,3,6-tetrahydro-4-methyl-3,6-dioxo-5H-pyrazolo[3,4-b]pyridin-5-ylidene]-1-propenyl]-1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]- (9CI) (CA INDEX NAME)

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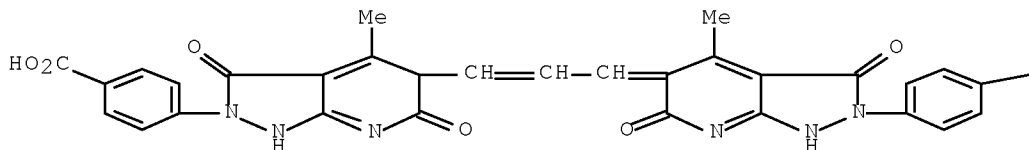
—CO<sub>2</sub>H

L5 ANSWER 31 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1996:175694 HCAPLUS Full-text  
 DOCUMENT NUMBER: 124:215913  
 TITLE: Color silver halide photographic material  
 INVENTOR(S): Ootani, Shigeaki  
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 69 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07333795	A	19951222	JP 1994-148646	19940607 <--
JP 3476544	B2	20031210		

PRIORITY APPLN. INFO.: JP 1994-148646 19940607 <--  
 ED Entered STN: 27 Mar 1996  
 AB In the title full-color Ag halide photog. material, 2 types of specified dyes having  $\geq 1$  dissociable group are dispersed in  $\geq 1$  photog. component layers as solid fine particles, and the magenta coupler-containing photosensitive emulsion layer contains a pyrazolotriazole coupler, and contains AgClBr, AgClBrI, AgClI or AgCl grains with AgCl content  $\geq 70\%$ , to which 0.0005-0.05 mol of a Br ion releasing compound and/or Br atom releasing compound is added per mol of Ag halide after Ag halide grains are formed but before the emulsion is applied to a photog. substrate.  
 IT 172839-14-4  
 RL: DEV (Device component use); USES (Uses)  
 (dye for photog. material)  
 RN 172839-14-4 HCAPLUS  
 CN Benzoic acid, 4-[5-[3-[2-(4-carboxyphenyl)-1,2,3,6-tetrahydro-4-methyl-3,6-dioxo-5H-pyrazolo[3,4-b]pyridin-5-ylidene]-1-propenyl]-1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]- (9CI) (CA INDEX NAME)

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—CO<sub>2</sub>H

L5 ANSWER 32 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:120235 HCAPLUS Full-text

DOCUMENT NUMBER: 124:289334

TITLE: Synthetic approaches towards some new  
1,2-dihydro-2-(heterocyclyl)-3H-indazol-3-ones

AUTHOR(S): Saeed, Aamer; Rama, Nasim H.

CORPORATE SOURCE: Dep. of Chemistry, Quaid-i-Azam Univ., Islamabad, Pak.

SOURCE: Journal of the Chemical Society of Pakistan (  
1995), 17(4), 232-6

CODEN: JCSPDF; ISSN: 0253-5106

PUBLISHER: Chemical Society of Pakistan

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 27 Feb 1996

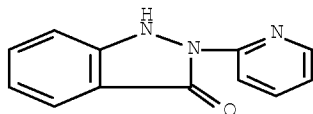
AB Two different synthetic approaches viz. reductive cyclization of N-heterocyclyl-2-nitrobenzanilides and the base catalyzed cyclization of 2-azido-N-heterocyclylbenzanilides were applied to the synthesis of some new 2-heterocyclylindazol-3-ones (4). However, both methods exhibited limited success, and, based upon the results of these investigations, a safe strategy involving the heteroarylation at N-2 of 1- carboethoxyindazolone, followed by deprotection at N-1 to furnish 4 was suggested for preparation of 2-heterocyclylindazolones.

IT 74152-92-4P 135066-28-3P 175653-65-3P  
175653-66-4P 175653-67-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

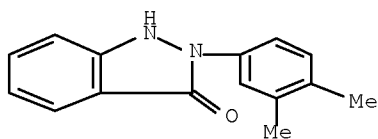
RN 74152-92-4 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-(2-pyridinyl)- (CA INDEX NAME)



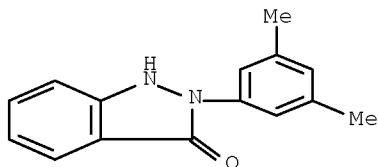
RN 135066-28-3 HCAPLUS

CN 3H-Indazol-3-one, 2-(3,4-dimethylphenyl)-1,2-dihydro- (CA INDEX NAME)

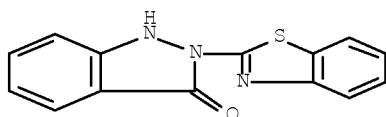


RN 175653-65-3 HCAPLUS

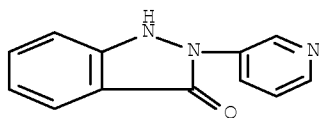
CN 3H-Indazol-3-one, 2-(3,5-dimethylphenyl)-1,2-dihydro- (CA INDEX NAME)



RN 175653-66-4 HCAPLUS  
CN 3H-Indazol-3-one, 2-(2-benzothiazolyl)-1,2-dihydro- (CA INDEX NAME)



RN 175653-67-5 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-2-(3-pyridinyl)- (CA INDEX NAME)



L5 ANSWER 33 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:84024 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 124:193710

TITLE: The anti-inflammatory activity of N-substituted indazolones in mice

AUTHOR(S): Tse, Elaine; Butner, Lori; Huang, Yunsheng; Hall, Iris H.

CORPORATE SOURCE: Div. Med. Chem., Natural Products, Sch. Pharm., Univ. North Carolina, Chapel Hill, NC, 27759-7360, USA

SOURCE: Archiv der Pharmazie (Weinheim, Germany) (1996), 329(1), 35-40

CODEN: ARPMAS; ISSN: 0365-6233

PUBLISHER: VCH

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 08 Feb 1996

AB N-Substituted indazolones were shown to be potent anti-inflammatory and analgesic agents in mice at 8 mg/kg. In addition, the agents were able to protect against death caused by endotoxins similar to those found in chronic infections. In part, the ability of these agents to suppress the inflammatory process is due to their blockade of cytokine release, e.g. TNF $\alpha$  and IL-1, as well as their inhibition of high affinity binding to receptors on target cells of inflammation. Suppressing these receptors can be linked to the inhibition by the agents of lysosomal hydrolytic enzymes, prostaglandin cyclooxygenase



and 5'-lipoxygenase activities. Free radical generation involved in inflammation was also stabilized in the presence of most of these agents.

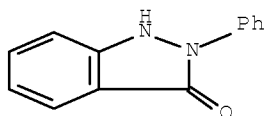
IT 17049-65-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(anti-inflammatory and analgesic activity of N-substituted indazolones in mice in relation to mechanism)

RN 17049-65-9 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 34 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:61279 HCAPLUS Full-text

DOCUMENT NUMBER: 124:131438

TITLE: High contrast silver halide photographic material with excellent storage stability

INVENTOR(S): Suzuki, Keiichi; Sakurai, Seiya

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 81 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 07295131	A	19951110	JP 1994-110200	19940427 <--
PRIORITY APPLN. INFO.:			JP 1994-110200	19940427 <--

ED Entered STN: 31 Jan 1996

AB The title material contains a hydrazine derivative(s), R1NA1NA2G1R2 [R1 = aliphatic, aromatic; R2 = H, alkyl, aryl, unsatd. heterocyclyl, alkoxy, aryloxy, amino, hydrazino; G1 = CO, SO2, SO, POR3, COCO, thiocarbonyl, iminomethylene; A1, A2 = H, alkylsulfonyl, arylsulfonyl, acyl; R3 = H, alkyl, aryl, unsatd. heterocyclyl, alkoxy, aryloxy, amino, hydrazino], and a surfactant(s), OP(Q1R1)(Q2R2)(Q3LZ) [R1 = aliphatic, alicyclic, aromatic, heterocyclyl; R2 = aliphatic, alicyclic, aromatic, heterocyclyl, LZ; Q1-3 = single bond, O, S, NR3, NR3CO; R3 = H, aliphatic, alicyclic, aromatic, heterocyclyl, LZ; L = divalent connecting group; Z = ionic group] in a photog. emulsion layer(s) and/or hydrophilic colloidal layer(s), and dye solid dispersions.

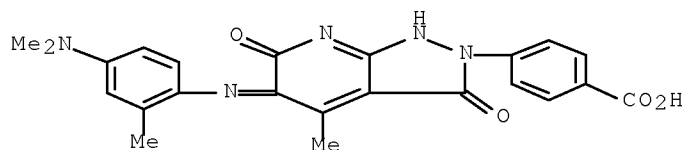
IT 163073-35-6 172839-10-0 172839-14-4

RL: DEV (Device component use); USES (Uses)

(high contrast silver halide photog. material with excellent storage stability containing)

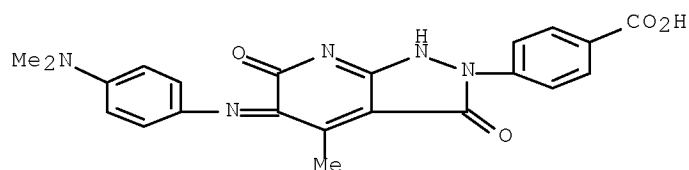
RN 163073-35-6 HCAPLUS

CN Benzoic acid, 4-[5-[[4-(dimethylamino)-2-methylphenyl]imino]-1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]- (CA INDEX NAME)



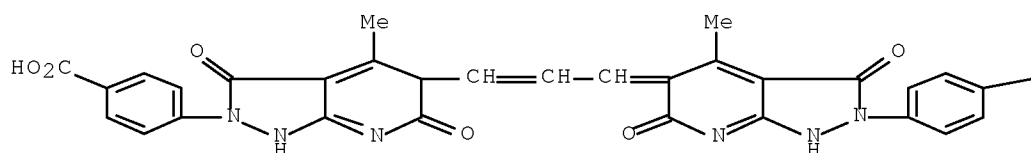
RN 172839-10-0 HCAPLUS

CN Benzoic acid, 4-[5-[[4-(dimethylamino)phenyl]imino]-1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]- (CA INDEX NAME)



RN 172839-14-4 HCAPLUS

CN Benzoic acid, 4-[5-[3-[2-(4-carboxyphenyl)-1,2,3,6-tetrahydro-4-methyl-3,6-dioxo-5H-pyrazolo[3,4-b]pyridin-5-ylidene]-1-propenyl]-1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]- (9CI) (CA INDEX NAME)



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—CO<sub>2</sub>H

L5 ANSWER 35 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:551008 HCAPLUS Full-text

DOCUMENT NUMBER: 122:302883

ORIGINAL REFERENCE NO.: 122:54913a,54916a

TITLE: Silver halide color photographic material and method for forming color proof

INVENTOR(S): Ozawa, Takashi; Matsumoto, Keisuke; Oono, Shigeru

## Serial No.:11/880,002

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 58 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06337506	A	19941206	JP 1993-151477	19930527 <--
PRIORITY APPLN. INFO.:			JP 1993-151477	19930527 <--

ED Entered STN: 17 May 1995

GI For diagram(s), see printed CA Issue.

AB In the title photog. material comprising  $\geq 1$  blue-, red-, and green-sensitive Ag halide emulsion layer containing couplers and  $\geq 1$  nonphotosensitive layer on a support, a coupler in the blue-sensitive Ag halide emulsion layer is an acetoamide-type yellow coupler, I [Ry1 = substituent, but not H; Q = nonmetallic atomic group forming 3-5-membered heterocyclyl containing N, S and/or P; Ry2 = alkyl, aryl, heterocyclyl; Xy = H, coupling-off group upon reaction with oxidized developing agent], and the nonphotosensitive layer contains a dye micropowder, D-(X)y [D = compound forming color; X = dissociative proton or group containing dissociative proton; y = 1-7]. The title method uses a developing agent represented by NH<sub>2</sub>-C<sub>6</sub>H<sub>4</sub>-N(Rd1)Rd2-OH [Rd1 = alkyl; Rd2 = alkylene].

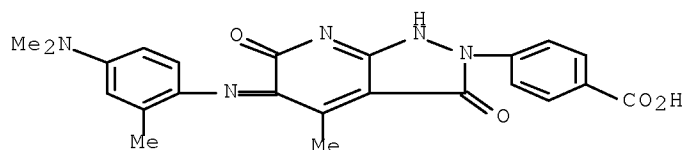
IT 163073-35-6

RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

(silver halide color photog. material and method for for forming color-proof)

RN 163073-35-6 HCAPLUS

CN Benzoic acid, 4-[5-[[4-(dimethylamino)-2-methylphenyl]imino]-1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]- (CA INDEX NAME)



L5 ANSWER 36 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:246544 HCAPLUS Full-text

DOCUMENT NUMBER: 122:31576

ORIGINAL REFERENCE NO.: 122:6239a,6242a

TITLE: Substituted 2-thiobenzothiazoles, process for their preparation and their use as herbicides

INVENTOR(S): Ganzer, Michael; Dorfmeister, Gabriele; Franke, Wilfried; Bohner, Juergen; Rees, Richard

PATENT ASSIGNEE(S): Schering A.-G., Germany

SOURCE: Ger. Offen., 23 pp.

CODEN: GWXXBX

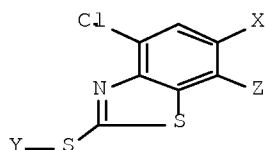
DOCUMENT TYPE: Patent

LANGUAGE: German

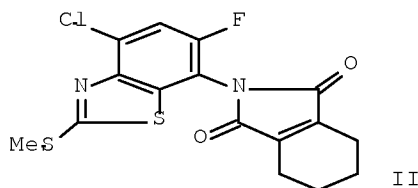
FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4241658	A1	19940609	DE 1992-4241658	19921204 <--
PRIORITY APPLN. INFO.:			DE 1992-4241658	19921204 <--
OTHER SOURCE(S):			MARPAT 122:31576	
ED Entered STN: 15 Dec 1994				
GI				



I



II

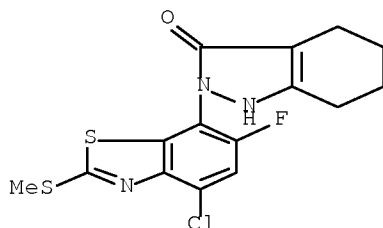
AB The title compds. I (X = H, halo; Y = H, alkyl, etc.; Z = tetrahydrophthalimido, heterocyclic group) were disclosed. Uses of I as herbicides are claimed. An example compound, [4-chloro-6-fluoro-2-(methylthio)-7-benzothiazolyl]-3,4,5,6-tetrahydrophthalimide (II) was prepared II showed activity against *Matricaria recutita* (chamomile) whereas *Triticum aestivum* (wheat) remained undamaged.

IT 159633-34-8

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reactant for [halo(mercapto)benzothiazolyl]phthalimide or analog herbicide)

RN 159633-34-8 HCAPLUS

CN 3H-Indazol-3-one, 2-[4-chloro-6-fluoro-2-(methylthio)-7-benzothiazolyl]-1,2,4,5,6,7-hexahydro- (CA INDEX NAME)



L5 ANSWER 37 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:426239 HCAPLUS Full-text

DOCUMENT NUMBER: 121:26239

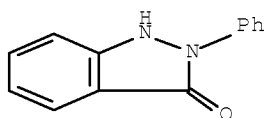
ORIGINAL REFERENCE NO.: 121:4581a,4584a

TITLE: Inhibition of cartilage breakdown by isothiazolones

AUTHOR(S): Wright, Stephen W.; Petratis, Joseph J.; Abelman, Matthew M.; Bostrom, Lori L.; Corbett, Ronald L.; Green, Alicia M.; Kindt, Rachel M.; Sherk, Susan R.;

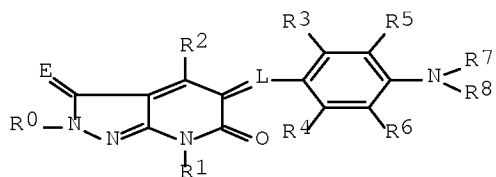
Serial No.:11/880,002

CORPORATE SOURCE: Magolda, Ronald L.  
Du Pont Exp. Stn., Du Pont Merck Pharm. Co.,  
Wilmington, DE, 19880, USA  
SOURCE: Bioorganic & Medicinal Chemistry Letters (1993  
, 3(12), 2875-8  
CODEN: BMCLE8; ISSN: 0960-894X  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
ED Entered STN: 23 Jul 1994  
AB Isothiazolones and isoselenazolones have been found to inhibit IL-1 $\beta$  induced  
breakdown of bovine nasal cartilage in an organ culture assay. The synthesis  
and preliminary SAR of these compds. are described. These compds. represent a  
novel, non-peptide lead series approach to the mediation of the chronic  
cartilage breakdown associated with arthritic disease.  
IT 17049-65-9  
RL: BIOL (Biological study)  
(cartilage breakdown inhibition by)  
RN 17049-65-9 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 38 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1994:335069 HCAPLUS Full-text  
DOCUMENT NUMBER: 120:335069  
ORIGINAL REFERENCE NO.: 120:58705a,58708a  
TITLE: Laser-induced thermal-transfer recording materials  
INVENTOR(S): Kubodera, Seiichi; Inagaki, Yoshio  
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05221164	A	19930831	JP 1992-58855	19920213 <--
JP 2745176	B2	19980428		
PRIORITY APPLN. INFO.:			JP 1992-58855	19920213 <--
ED Entered STN: 25 Jun 1994				
GI				



I

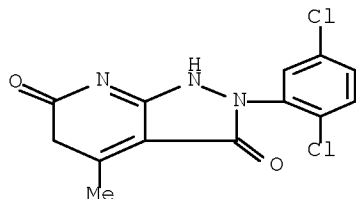
AB The title thermal-transfer recording material, irradiated with a laser beam in response to image information, comprises thermal-transfer dye-donating layer (donor sheet) containing a heat-transferable dye, a dye-receiving layer (receiving sheet), and a photothermal conversion agent contained in  $\geq 1$  of said layers, in which the photothermal conversion agent is an IR-absorbing dye represented by I [L = N, moiety in which methines are bonded via conjugated double bonds; E = O, S, NR<sub>9</sub>; R<sub>0</sub>, R<sub>9</sub> = H, alkyl, alkenyl, alkynyl, aryl, heterocyclyl, amino, hydrazino, diazenyl; R<sub>0</sub> and R<sub>9</sub> may form ring by combining together; R<sub>1</sub> = H, alkyl, aryl, alkenyl, alkynyl, heterocyclyl; R<sub>2</sub> = H, halo, cyano, nitro, hydroxy, carboxyl, alkyl, aryloxy, alkoxycarbonyl, aryloxycarbonyl, amino, acyloxy, carbamoyl, sulfamoyl, alkylthio, arylthio, alkylsulfonyl, arylsulfonyl, alkynyl; R<sub>3,4</sub> = H, halo, alkoxy, alkyl, alkenyl, aryloxy, aryl; R<sub>5,6</sub> = H, substituent; R<sub>7,8</sub> = alkyl, aryl, vinyl, acyl, alkyl, arylsulfonyl; R<sub>3,5</sub>, R<sub>4,6</sub>, R<sub>7,8</sub>, R<sub>5,7</sub>, and R<sub>6,8</sub> may form rings by combining with adjacent group].

IT 137079-59-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and reaction of, laser-induced thermal-transfer recording material from)

RN 137079-59-5 HCAPLUS

CN 2H-Pyrazolo[3,4-b]pyridine-3,6(5H,7H)-dione, 2-(2,5-dichlorophenyl)-4-methyl- (9CI) (CA INDEX NAME)

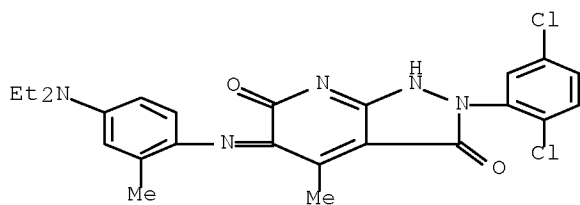


IT 137079-55-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and use of, laser-induced thermal-transfer recording material from)

RN 137079-55-1 HCAPLUS

CN 2H-Pyrazolo[3,4-b]pyridine-3,6(5H,7H)-dione, 2-(2,5-dichlorophenyl)-5-[[4-(diethylamino)-2-methylphenyl]imino]-4-methyl- (9CI) (CA INDEX NAME)



L5 ANSWER 39 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1994:270406 HCAPLUS Full-text  
 DOCUMENT NUMBER: 120:270406  
 ORIGINAL REFERENCE NO.: 120:47907a, 47910a  
 TITLE: 2-[(4-Triazolonylphenoxy)methyl]phenoxy]alkanoate  
 herbicides  
 INVENTOR(S): Theodoridis, George  
 PATENT ASSIGNEE(S): FMC Corp., USA  
 SOURCE: U.S., 24 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5262390	A	19931116	US 1992-935601	19920826 <--
US 5344812	A	19940906	US 1993-107560	19930817 <--
IL 106734	A	19981227	IL 1993-106734	19930819 <--
WO 9404514	A1	19940303	WO 1993-US7837	19930825 <--
W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9350833	A	19940315	AU 1993-50833	19930825 <--
AU 671311	B2	19960822		
EP 656892	A1	19950614	EP 1993-920234	19930825 <--
EP 656892	B1	20010613		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
HU 70890	A2	19951128	HU 1995-603	19930825 <--
HU 218700	B	20001128		
JP 08501774	T	19960227	JP 1993-506546	19930825 <--
JP 2652084	B2	19970910		
CZ 282413	B6	19970716	CZ 1995-518	19930825 <--
PL 172588	B1	19971031	PL 1993-307728	19930825 <--
CA 2143323	C	19971223	CA 1993-2143323	19930825 <--
RU 2113434	C1	19980620	RU 1995-108542	19930825 <--
RO 114254	B1	19990226	RO 1995-441	19930825 <--
CN 1083479	A	19940309	CN 1993-116971	19930826 <--
CN 1035434	B	19970716		
ZA 9306274	A	19940316	ZA 1993-6274	19930826 <--
FI 9500865	A	19950420	FI 1995-865	19950224 <--
NO 9500705	A	19950424	NO 1995-705	19950224 <--
US 5798316	A	19980825	US 1997-865306	19970529 <--
PRIORITY APPLN. INFO.:			US 1992-935601	A2 19920826 <--

Serial No.:11/880,002

US 1993-107560

A2 19930817 <--

WO 1993-US7837

W 19930825 <--

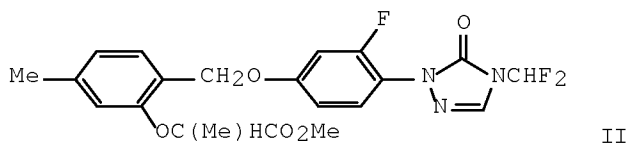
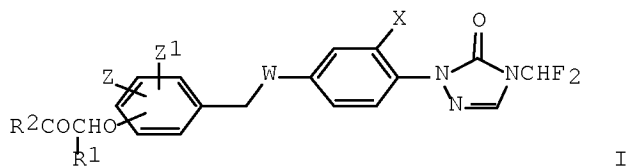
US 1995-523991

A2 19950905 <--

OTHER SOURCE(S): MARPAT 120:270406

ED Entered STN: 28 May 1994

GI



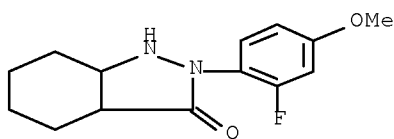
AB The title compds. [I; R1 = H, Me; R2 = OR, NH2, PhNH, alkylamino, alkenylamino, alkoxyamino, CN, etc.; R = lower alkyl, etc.; W = O, S; X, Z1 = H, F, Cl; Z = H, F, Cl, Br, lower alkyl, MeO], useful in controlling unwanted plant growth such as grassy or broadleaf plant species, are prepared. Thus, triazolone II, prepared from 3,4-difluoronitrobenzene in 9 steps, demonstrated pronounced herbicidal activity against a wide variety of plant species.

IT 154080-01-0

RL: RCT (Reactant); RACT (Reactant or reagent)  
(formation during herbicide preparation)

RN 154080-01-0 HCAPLUS

CN 3H-Indazol-3-one, 2-(2-fluoro-4-methoxyphenyl)octahydro- (CA INDEX NAME)



RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. as intermediate in prepn. of herbicides)

L5 ANSWER 40 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:94918 HCAPLUS Full-text

DOCUMENT NUMBER: 120:94918

ORIGINAL REFERENCE NO.: 120:16651a,16654a

TITLE: The cytotoxicity of N-substituted indazolones in murine and human tumor cells

AUTHOR(S): Hall, I. H.; Wong, O. T.; Hall, E. S.; Chen, L. K.

CORPORATE SOURCE: Sch. Pharm., Univ. North Carolina, Chapel Hill, NC, 27559-7360, USA

SOURCE: Anti-Cancer Drugs (1993), 4(3), 389-93



DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 05 Mar 1994

AB N-substituted indazolones are effective cytotoxic agents, causing cell death in a number of tissue culture lines, e.g. L1210, Tmolt3, colon adenocarcinoma and HeLa-S3. Selected agents were also active against the growth of KB, bronchogenic lung, osteosarcoma and glioma. The mode of action of the derivs. involves inhibition of de novo purine synthesis of L1210 cells, which reduces DNA and RNA synthesis. Agents lowered d(NTP) pools, further reducing DNA synthesis. DNA strand scission was evident after incubation with N-substituted indazolones for 24 h at 100  $\mu$ M, lowering DNA synthesis and causing cell death.

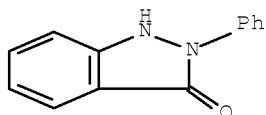
IT 17049-65-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antitumor activity of)

RN 17049-65-9 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 41 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:408731 HCAPLUS Full-text

DOCUMENT NUMBER: 119:8731

ORIGINAL REFERENCE NO.: 119:1793a,1796a

TITLE: Study on 3,5-pyrazolidinedione and its derivatives.  
Part II

AUTHOR(S): Salem, Mounir A. I.; Madkour, Hassan M. F.; Al-Nuaimi, I. S.; Al-Qaradawi, S. Y.

CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Cairo, Egypt

SOURCE: Journal of the Serbian Chemical Society (1993)  
, 58(2), 89-100

CODEN: JSCSEN; ISSN: 0352-5139

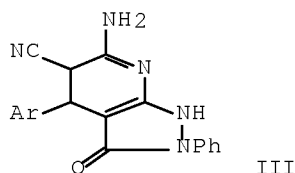
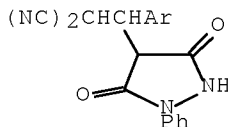
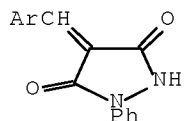
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 119:8731

ED Entered STN: 10 Jul 1993

GI

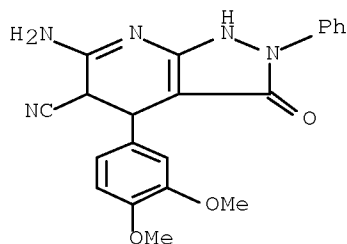


AB The 4-arylidene derivs. I [Ar = (un)substituted Ph, 1-naphthyl, thieno] of 1-Ph-3,5-pyrazolidinedione were alkylated on both the O and N atoms. The behavior of I toward base-catalyzed Michael reactions was investigated. Thus, reaction of I [Ar = 3,4-(MeO)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>, 1-naphthyl, thieno] with malononitrile in EtOH with pyridine catalyst afforded Michael adducts II in 31-45% yield. Reaction of the same compds. I with malononitrile in EtOH with NH<sub>4</sub>OAc afforded cyclic Michael adducts III in 49-53% yield.

IT 148063-10-9P 148063-11-0P 148063-12-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

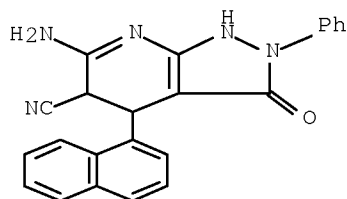
RN 148063-10-9 HCAPLUS

CN 1H-Pyrazolo[3,4-b]pyridine-5-carbonitrile, 6-amino-4-(3,4-dimethoxyphenyl)-2,3,4,5-tetrahydro-3-oxo-2-phenyl- (CA INDEX NAME)



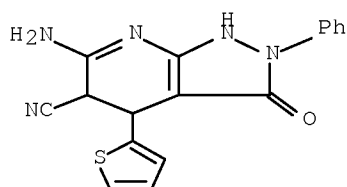
RN 148063-11-0 HCAPLUS

CN 1H-Pyrazolo[3,4-b]pyridine-5-carbonitrile, 6-amino-2,3,4,5-tetrahydro-4-(1-naphthalenyl)-3-oxo-2-phenyl- (CA INDEX NAME)



RN 148063-12-1 HCAPLUS

CN 1H-Pyrazolo[3,4-b]pyridine-5-carbonitrile, 6-amino-2,3,4,5-tetrahydro-3-oxo-2-phenyl-4-(2-thienyl)- (CA INDEX NAME)



L5 ANSWER 42 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:101946 HCAPLUS Full-text

DOCUMENT NUMBER: 118:101946

ORIGINAL REFERENCE NO.: 118:17861a,17864a

TITLE: Preparation of substituted benzothiazoles as herbicides

INVENTOR(S): Ganzer, Michael; Dorfmeister, Gabriele; Franke, Wilfried; Johann, Gerhard; Rees, Richard

PATENT ASSIGNEE(S): Schering A.-G., Germany

SOURCE: Ger. Offen., 18 pp.

CODEN: GWXXBX

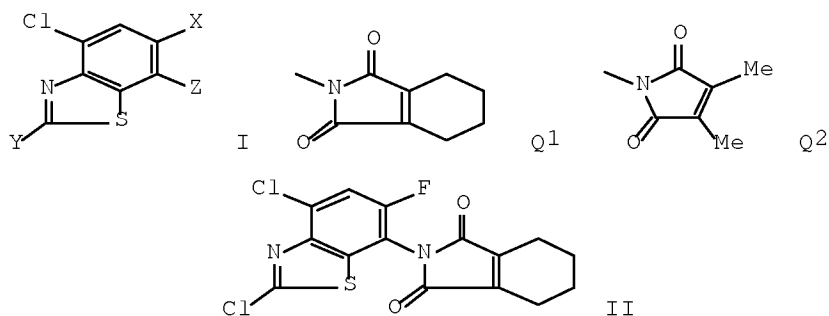
DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4117508	A1	19921126	DE 1991-4117508	19910524 <--
WO 9220675	A1	19921126	WO 1992-EP1268	19920521 <--
W: AU, BG, BR, CA, CS, FI, HU, JP, KR, PL, RO, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
AU 9218828	A	19921230	AU 1992-18828	19920521 <--
AU 659647	B2	19950525		
EP 583353	A1	19940223	EP 1992-911096	19920521 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
BR 9206055	A	19941206	BR 1992-6055	19920521 <--
JP 06511232	T	19941215	JP 1992-510439	19920521 <--
HU 68674	A2	19950728	HU 1993-3323	19920521 <--
ZA 9203766	A	19930127	ZA 1992-3766	19920522 <--
CN 1068822	A	19930210	CN 1992-104840	19920523 <--
US 5424443	A	19950613	US 1994-142440	19940124 <--
AU 9527270	A	19951005	AU 1995-27270	19950731 <--
PRIORITY APPLN. INFO.:			DE 1991-4117508	A 19910524 <--
			WO 1992-EP1268	A 19920521 <--
OTHER SOURCE(S):			MARPAT 118:101946	
ED Entered STN:			19 Mar 1993	
GI				

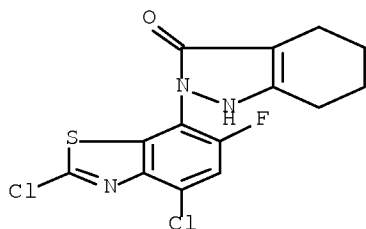


AB Title compds. I [X = H, F, Cl; Y = H, Cl, Br, C1-6 (halo)alkyl, C1-6 alkoxy, C3-4 haloalkoxy; Z = Q1, Q2, etc.] were prepared as herbicides. Thus, nitration of 2,4-dichloro-6-fluorobenzthiazole followed by reduction gave 7-amino-2,4-dichloro-6-fluorobenzothiazole. The latter was refluxed with 3,4,5,6-tetrahydrophthalic anhydride in glacial HOAc to give title compound II in 70% yield. II at 0.03 kg/ha postemergent gave 90-100% control of Veronica persica with no damage to wheat.

IT 145915-54-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as intermediate for herbicides)

RN 145915-54-4 HCAPLUS

CN 3H-Indazol-3-one, 2-(2,4-dichloro-6-fluoro-7-benzothiazolyl)-1,2,4,5,6,7-hexahydro- (CA INDEX NAME)



L5 ANSWER 43 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:661487 HCAPLUS Full-text

DOCUMENT NUMBER: 117:261487

ORIGINAL REFERENCE NO.: 117:45053a,45056a

TITLE: Silver halide color photographic material with improved image sharpness and color reproducibility

INVENTOR(S): Ishimaru, Shingo

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent

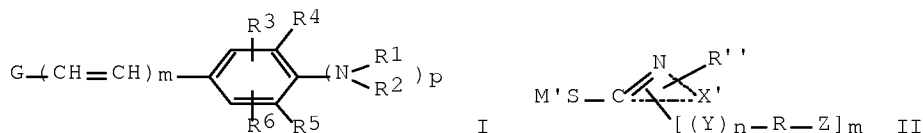
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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 JP 04031851 A 19920204 JP 1990-138816 19900529 <--  
 PRIORITY APPLN. INFO.: JP 1990-138816 19900529 <--  
 ED Entered STN: 26 Dec 1992  
 GI



AB In a Ag halide color photog. material having  $\geq 1$  photosensitive Ag halide emulsion layer on a support,  $\geq 1$  photog. material constituting layer contains  $\geq 1$  microcryst. dispersion of  $\geq 1$  compound selected from I [G = A:CR-, XYZ:CR-; A, A' = acid nucleus; B = base nucleus; X, Y = electron acceptor; R = H, alkyl; R1,2 = alkyl, aryl, acyl, sulfonyl; R1 and R2 may form a 5- or 6-membered ring; R3,6 = H, OH, COOH, alkyl, alkoxy, halo; R4,5 = H, nonmetallic atomic moiety forming 5- or 6-membered ring by linking of R1 with R4 or R2 with R5; L1-3 = methine; m = 0, 1; n, q = 0, 1, 2; p = 0, 1; when p = 0, R3 is OH or COOH and R4,5 are H; B' = COOH, sulfamoyl, heterocyclyl containing sulfonamide], A:L1-(L2:L3)n-A', A:(L1-L2)2-q:B, XYZ:CH-CH:B, and (NC)2C:CB'(CN) [all of said compds. contain ionizable moieties with  $4 \leq pK_a \leq 11$  in a solution containing EtOH volume ratio 1:1 ]. Also, the photosensitive emulsion layer and/or nonphotosensitive emulsion layer adjacent to the photosensitive emulsion layers contain surface- and/or internally-fogged Ag halide grains, and  $\geq 1$  photog. material constituting layer contains II [M1 = H, anion, protective moiety for mercapto which cleaves through reaction with anion or alkali; Z, X' = atomic moiety forming 5- or 6-membered ring containing S, Se, N, O, etc.; R = alkylene, alkenylene, aralkylene, arylene; Z = polar moiety; Y = S, O, NR1, O:C-NR2, NR3-C:O, SO2NR4, NR5SO2, O:CO, OC:O, O:C, NR6-C(:O)-NR7, NR8-C(:S)-NR9, NR10-C(:O)O; R1-10 = H, alkyl, aryl, alkenyl, aralkyl; R'' = H; n = 0, 1; m = 0, 1, 2] and(or) A-(Time)t-X [A = redox nucleus which is oxidized during photog. processing to release (Time)t-X; Time = timing moiety bonding to A via S, N, or O; t = 0, 1; and X = development inhibitor].

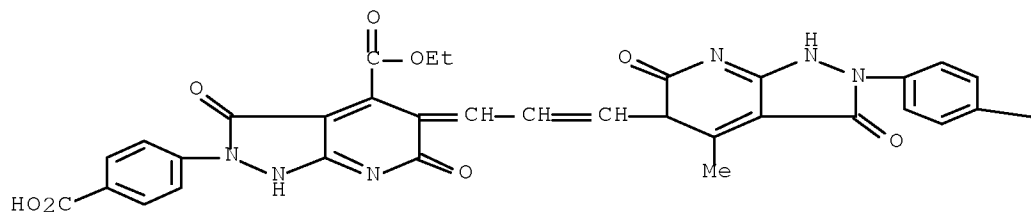
IT 144454-85-3

RL: USES (Uses)

(silver halide color photog. material containing, with improved image sharpness)

RN 144454-85-3 HCAPLUS

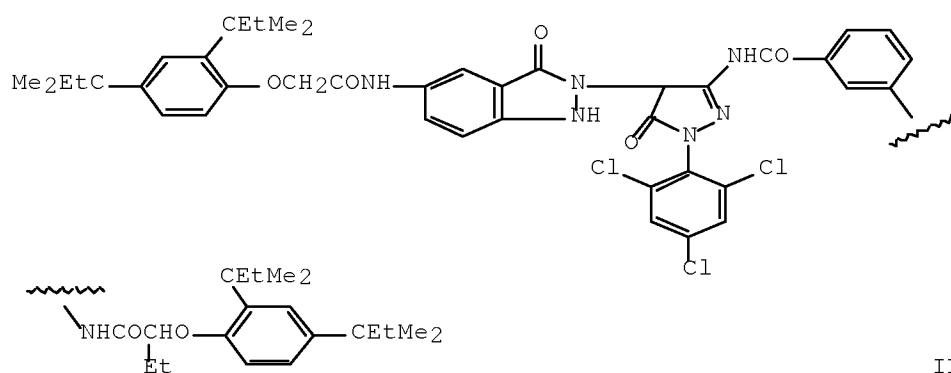
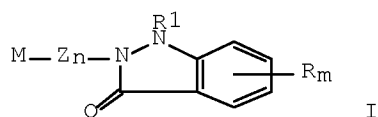
CN 1H-Pyrazolo[3,4-b]pyridine-4-carboxylic acid, 2-(4-carboxyphenyl)-5-[3-[2-(4-carboxyphenyl)-2,3,5,6-tetrahydro-4-methyl-2,6-dioxo-1H-pyrazolo[3,4-b]pyridin-5-yl]-2-propenylidene]-2,3,5,6-tetrahydro-3,6-dioxo-, 4-ethyl ester (9CI) (CA INDEX NAME)



—CO<sub>2</sub>H

L5 ANSWER 44 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1992:479841 HCAPLUS Full-text  
 DOCUMENT NUMBER: 117:79841  
 ORIGINAL REFERENCE NO.: 117:13787a,13790a  
 TITLE: Magenta coupler for silver halide photographic material  
 INVENTOR(S): Ikesu, Satoru  
 PATENT ASSIGNEE(S): Konica Co., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 03179345	A	19910805	JP 1989-318630	19891207 <--
PRIORITY APPLN. INFO.:			JP 1989-318630	19891207 <--
ED Entered STN: 23 Aug 1992				
GI				



AB The color photog. material contains indazolinone derivative I (M = magenta coupler residue capable of releasing the rest by the coupling reaction with the oxidized developing agent; Z = timing group; R = substituent which may form a ring; R1 = H, or a group capable of leaving during processing; n = 0, 1; m = 0 or an integer). Thus, a color film in which magenta coupler II was incorporated in the green-sensitive layer showed an improved color developability, granularity, and fastness.

IT 138937-95-8 138937-96-9 138937-97-0  
138938-02-0 138938-03-1

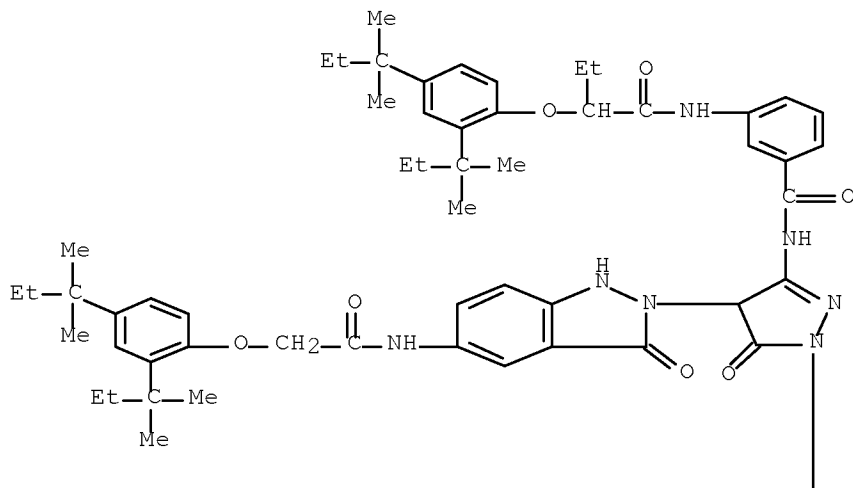
RL: USES (Uses)

(magenta coupler, photog. emulsion containing)

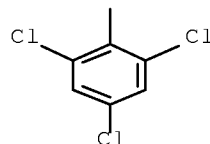
RN 138937-95-8 HCAPLUS

CN Benzamide, N-[4-[5-[[[2,4-bis(1,1-dimethylpropyl)phenoxy]acetyl]amino]-1,3-dihydro-3-oxo-2H-indazol-2-yl]-4,5-dihydro-5-oxo-1-(2,4,6-trichlorophenyl)-1H-pyrazol-3-yl]-3-[[2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-1-oxobutyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A

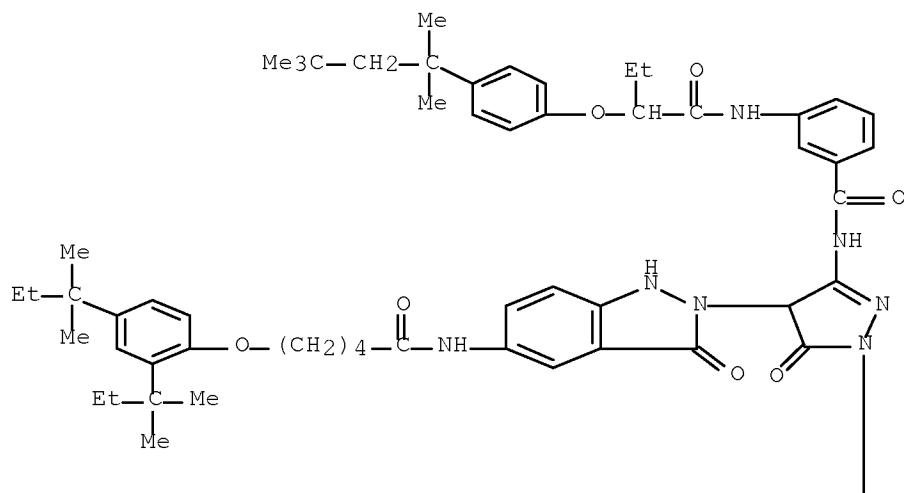


PAGE 2-A

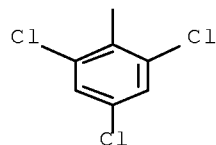


RN 138937-96-9 HCAPLUS  
 CN 1H-Indazole-5-carboxamide, N-[4-[2,4-bis(1,1-dimethylpropyl)phenoxy]butyl]-  
 2-[4,5-dihydro-5-oxo-3-[[3-[[1-oxo-2-[4-(1,1,3,3-  
 tetramethylbutyl)phenoxy]butyl]amino]benzoyl]amino]-1-(2,4,6-  
 trichlorophenyl)-1H-pyrazol-4-yl]-2,3-dihydro-3-oxo- (9CI) (CA INDEX  
 NAME)

PAGE 1-A



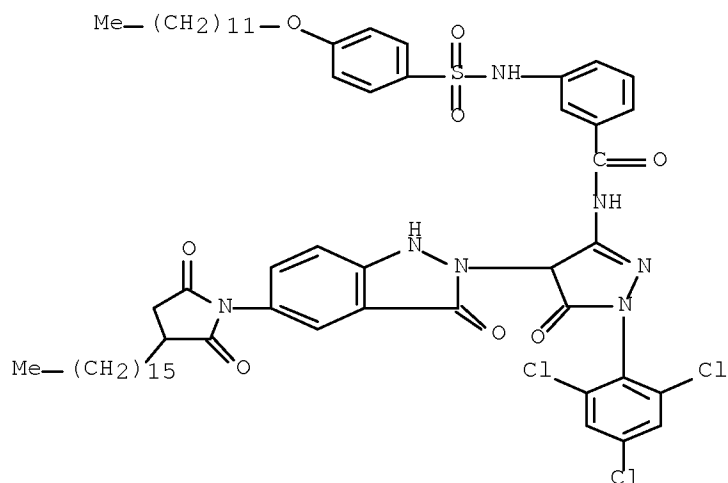
PAGE 2-A





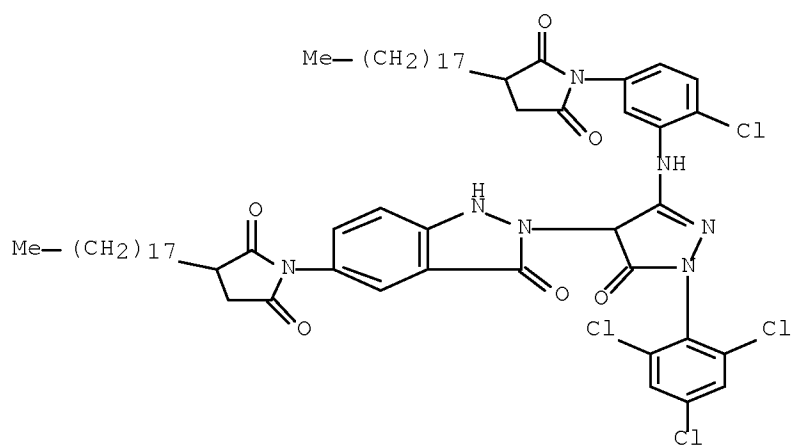
RN 138937-97-0 HCAPLUS

CN Benzamide, 3-[[[4-(dodecyloxy)phenyl]sulfonyl]amino]-N-[4-[5-(3-hexadecyl-2,5-dioxo-1-pyrrolidinyl)-1,3-dihydro-3-oxo-2H-indazol-2-yl]-4,5-dihydro-5-oxo-1-(2,4,6-trichlorophenyl)-1H-pyrazol-3-yl]- (CA INDEX NAME)



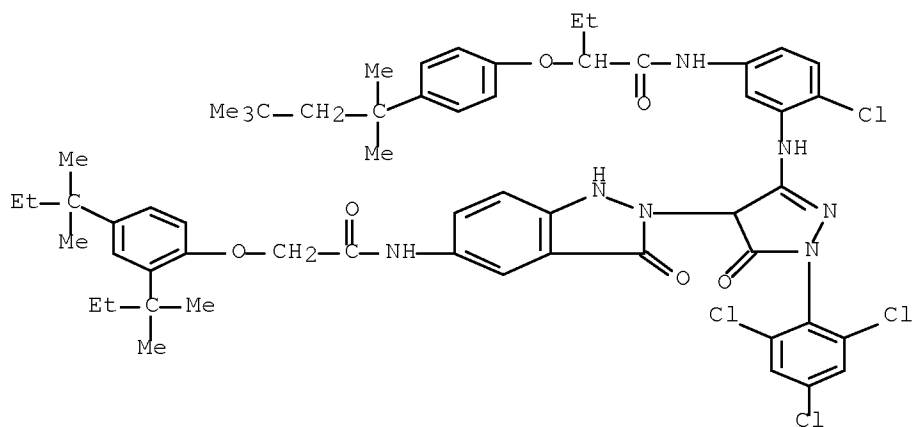
RN 138938-02-0 HCAPLUS

CN 2,5-Pyrrolidinedione, 1-[4-chloro-3-[[4-[1,3-dihydro-5-(3-octadecyl-2,5-dioxo-1-pyrrolidinyl)-3-oxo-2H-indazol-2-yl]-4,5-dihydro-5-oxo-1-(2,4,6-trichlorophenyl)-1H-pyrazol-3-yl]amino]phenyl]-3-octadecyl- (9CI) (CA INDEX NAME)



RN 138938-03-1 HCAPLUS

CN Butanamide, N-[3-[[4-[5-[[[2,4-bis(1,1-dimethylpropyl)phenoxy]acetyl]amino]-1,3-dihydro-3-oxo-2H-indazol-2-yl]-4,5-dihydro-5-oxo-1-(2,4,6-trichlorophenyl)-1H-pyrazol-3-yl]amino]-4-chlorophenyl]-2-[4-(1,1,3,3-tetramethylbutyl)phenoxy]- (9CI) (CA INDEX NAME)



IT 138965-12-5P

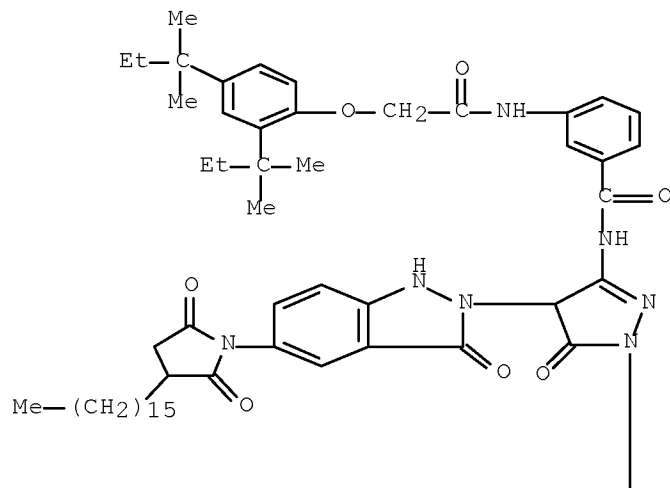
RL: PREP (Preparation)

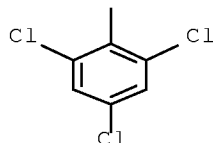
(preparation of, magenta coupler, photog. emulsion containing)

RN 138965-12-5 HCAPLUS

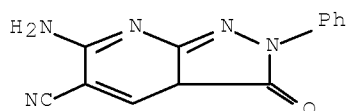
CN Benzamide, 3-[[[2,4-bis(1,1-dimethylpropyl)phenoxy]acetyl]amino]-N-[4-[5-(3-hexadecyl-2,5-dioxo-1-pyrrolidinyl)-1,3-dihydro-3-oxo-2H-indazol-2-yl]-4,5-dihydro-5-oxo-1-(2,4,6-trichlorophenyl)-1H-pyrazol-3-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A

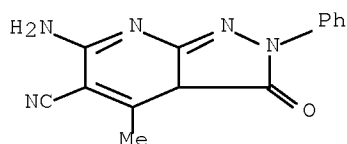




L5 ANSWER 45 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1992:426413 HCAPLUS Full-text  
 DOCUMENT NUMBER: 117:26413  
 ORIGINAL REFERENCE NO.: 117:4767a,4770a  
 TITLE: Studies with polyfunctionally substituted heterocycles: synthesis of new pyridines, naphtho[1,2-b]pyrans, pyrazolo[3,4-b]pyridines and pyrazolo[1,5-a]pyrimidines  
 AUTHOR(S): Elnagdi, Mohamed Hilmy; Elghandour, Ahmed Hafiz Husein; Ibrahim, Mohamed Kamal Ahmed; Hafiz, Ibrahim Saad Abdel  
 CORPORATE SOURCE: Fac. Sci., Cairo Univ., Giza, Egypt  
 SOURCE: Zeitschrift fuer Naturforschung, B: Chemical Sciences (1992), 47(4), 572-8  
 CODEN: ZNBSEN; ISSN: 0932-0776  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ED Entered STN: 26 Jul 1992  
 AB A variety of new polyfunctionally substituted pyridines, naphthopyrans and pyrazolopyrimidines were prepared via reaction of ylidenemalononitriles with thiophenol, thionaphthol, naphthols and aminopyrazoles.  
 IT 141987-81-7P 141987-82-8P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and spectra of)  
 RN 141987-81-7 HCAPLUS  
 CN 2H-Pyrazolo[3,4-b]pyridine-5-carbonitrile, 6-amino-3,3a-dihydro-3-oxo-2-phenyl- (CA INDEX NAME)

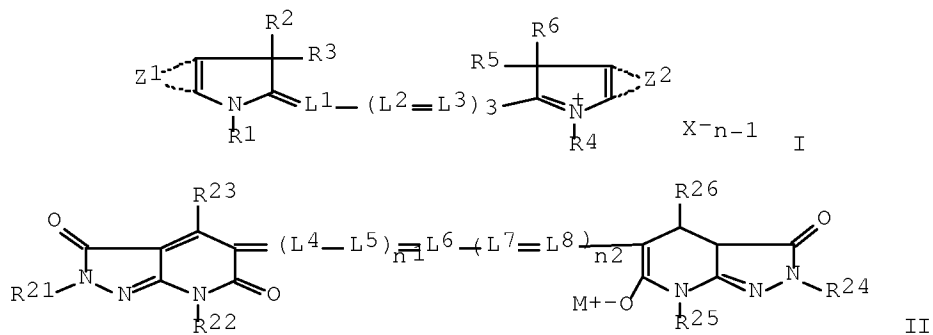


RN 141987-82-8 HCAPLUS  
 CN 2H-Pyrazolo[3,4-b]pyridine-5-carbonitrile, 6-amino-3,3a-dihydro-3-oxo-4-methyl-2-phenyl- (9CI) (CA INDEX NAME)



L5 ANSWER 46 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1992:205821 HCAPLUS Full-text  
 DOCUMENT NUMBER: 116:205821  
 ORIGINAL REFERENCE NO.: 116:34659a,34662a  
 TITLE: Silver halide photographic light-sensitive materials  
 containing multiple filter layers  
 INVENTOR(S): Ohno, Shigeru; Mihara, Yuji  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 77 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 445627	A1	19910911	EP 1991-102835	19910226 <--
EP 445627	B1	19960911		
R: BE, DE, FR, GB, IT, NL				
JP 03251841	A	19911111	JP 1990-50138	19900301 <--
PRIORITY APPLN. INFO.:			JP 1990-50138	A 19900301 <--
OTHER SOURCE(S):	MARPAT 116:205821			
ED Entered STN:	16 May 1992			
GI				



AB The title photog. material comprises an IR-sensitive AgCl-containing emulsion layer sensitized by  $\geq 1$  4-quinoline moiety-containing tricarbocyanine dye and/or dicarbocyanine dye,  $\geq 1$  hydrophilic colloid layer containing dye I (R1-6 = alkyl; z1-2 = non-metal required to form benzo-, naphtho-, or 5- and 6-membered heterocyclic ring; R1-6 and z1-2 provide  $\geq 3$  acid groups in the dye; L1-3 = methine group; X = anion; n = 1 or 2 and n = 1 when the dye forms an intramol. salt) and  $\geq 1$  hydrophilic colloid layer(s) containing  $\geq 1$  dye II (R21, 24 = H, aliphatic, aromatic or heterocyclic group; R22, 25 = R21, COR29 or SO2R29; R23, 26 = H, cyano, alkyl, aryl, COOR27, OR27, NR27R28, N(R28)COR29, N(R28)SO2R29, CONR27R28, or N(R27)CONR27R28; R29 = aliphatic or aromatic group; R27, 28 = H or R29; L4-8 = methine group; n1, n2 = zero or 1; M+ = H+,

cation;  $\geq 1$  or R21-26 and L4-8 contains  $\geq 1$  CO<sub>2</sub> or SO<sub>3</sub>. The photog. materials show improved IR-sensitivity and safe-light safety.

IT 65563-44-2F

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of photog. filter dye)

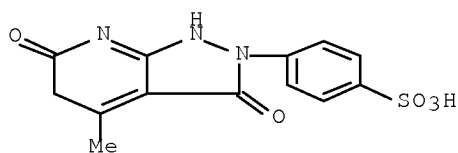
RN 65563-44-2 HCAPLUS

CN Benzenesulfonic acid, 4-(1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl)-, compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 65563-43-1

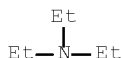
CMF C13 H11 N3 O5 S



CM 2

CRN 121-44-8

CMF C6 H15 N



L5 ANSWER 47 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:40993 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 116:40993

ORIGINAL REFERENCE NO.: 116:7017a, 7020a

TITLE: Reaction of azoarenes with tributyltin hydride

AUTHOR(S): Alberti, Angelo; Bedogni, Nicola; Benaglia, Massimo; Leardini, Rino; Nanni, Daniele; Pedulli, Gian Franco; Tundo, Antonio; Zanardi, Giuseppe

CORPORATE SOURCE: ICOCEA, CNR, Ozzano Emilia, I-40064, Italy

SOURCE: Journal of Organic Chemistry (1992), 57(2), 607-13

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 116:40993

ED Entered STN: 08 Feb 1992

AB Tributyltin hydride when reacted with a series of substituted azoarenes, e.g. PhN:NPh, afforded hydrazo compds., e.g. PhNHNHPh, with high chemoselectivity and good to high yields. With ortho-substituted azoarenes, mixts. of hydrazo

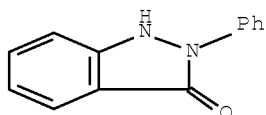
derivs. and N-heterocycles or cyclic products only were obtained. The kinetic law of the process was determined in the presence and in the absence of AIBN; with the radical initiator the reaction proceeds via a radical chain mechanism, whereas without AIBN the presence of stannyl free radicals could be discarded. The mechanism of the noninitiated reaction is discussed. EPR characterization of spin adducts obtained by reacting Group IVB organometallic radicals with azo compds. is reported.

IT 17049-65-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 17049-65-9 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 48 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:643821 HCAPLUS Full-text

DOCUMENT NUMBER: 115:243821

ORIGINAL REFERENCE NO.: 115:41333a, 41336a

TITLE: Silver halide photographic material

INVENTOR(S): Inagaki, Yoshi; Adachi, Keiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 109 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

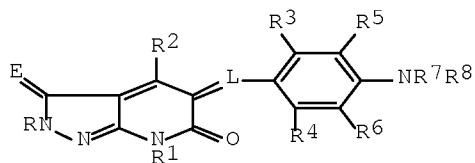
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 385461	A1	19900905	EP 1990-103977	19900301 <--
EP 385461	B1	19950118		
R: BE, DE, FR, GB, IT, NL				
JP 03007931	A	19910116	JP 1990-32772	19900214 <--
US 5063146	A	19911105	US 1990-487078	19900301 <--
PRIORITY APPLN. INFO.:			JP 1989-50874	A 19890302 <--

OTHER SOURCE(S): MARPAT 115:243821

ED Entered STN: 29 Nov 1991

GI



I

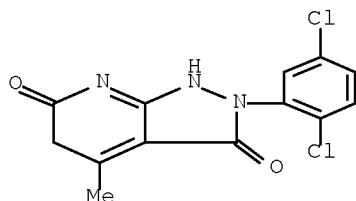
AB A Ag halide photog. material comprises a hydrophilic colloidal layer containing a dispersion of fine particles of a dye I (L = N or a group composed of 1,3,5, or 7 methine groups connected via conjugated double bonds; E = O, S, or NR<sub>9</sub>; R, R<sub>9</sub> = H, alkyl, alkenyl, alkynyl, aryl, heterocyclyl, amino, hydrazino, or diazenyl or R and R<sub>9</sub> together may form a ring; R<sub>1</sub> = H, alkyl, aryl, alkenyl, alkynyl, or heterocyclyl; R<sub>2</sub> = H, halogen, CN, NO<sub>2</sub>, OH, carboxyl, alkyl, aryl, alkenyl, alkoxy, aryloxy, alkoxycarbonyl, aryloxy, carbamoyl, sulfamoyl, alkylthio, arylthio, alkylsulfonyl, arylsulfonyl, alkynyl, or heterocyclyl; R<sub>3</sub>, R<sub>4</sub> = H, halogen, alkoxy, alkyl, alkenyl, aryloxy, or aryl; R<sub>5</sub>, R<sub>6</sub> = H or a group capable of replacing a H atom; R<sub>7</sub>, R<sub>8</sub> = alkyl, aryl, vinyl, acyl, alkylsulfonyl, or arylsulfonyl; and R<sub>3</sub> and R<sub>5</sub>, R<sub>4</sub> and R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub>, R<sub>5</sub> and R<sub>7</sub>, or R<sub>6</sub> and R<sub>8</sub> together may form a ring). I absorbs light in the near IR region, colors a specific hydrophilic colloidal layer without diffusing to other layers, and is rapidly decolorized or washed off upon processing.

IT 137079-59-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and reaction of, photog. dye form)

RN 137079-59-5 HCAPLUS

CN 2H-Pyrazolo[3,4-b]pyridine-3,6(5H,7H)-dione, 2-(2,5-dichlorophenyl)-4-methyl- (9CI) (CA INDEX NAME)

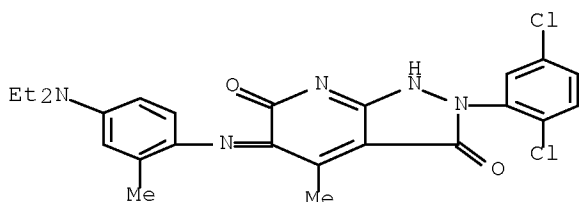


IT 137079-55-1P

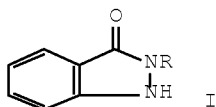
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and use of, as dye for photog. material)

RN 137079-55-1 HCAPLUS

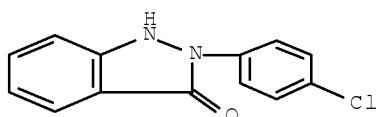
CN 2H-Pyrazolo[3,4-b]pyridine-3,6(5H,7H)-dione, 2-(2,5-dichlorophenyl)-5-[[4-(diethylamino)-2-methylphenyl]imino]-4-methyl- (9CI) (CA INDEX NAME)



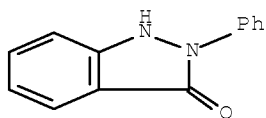
DOCUMENT NUMBER: 115:71461  
 ORIGINAL REFERENCE NO.: 115:12351a,12354a  
 TITLE: A convenient synthesis of 2-arylindazol-3-ones  
 AUTHOR(S): Bird, Clive W.; Chng, Joanne C. W.; Rama, Nasim H.;  
 Saeed, Aamer  
 CORPORATE SOURCE: Dep. Chem., King's Coll. London, London, WC2R 2LS, UK  
 SOURCE: Synthetic Communications (1991), 21(4),  
 545-8  
 CODEN: SYNCAV; ISSN: 0039-7911  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 115:71461  
 ED Entered STN: 23 Aug 1991  
 GI



AB The reductive cyclization of o-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CONHR (R = Ph, substituted Ph) with zinc  
 and sodium hydroxide in aqueous methanol gave 2-arylindazol-3-ones I.  
 IT 17049-63-7P 17049-65-9P 74152-87-7P  
 74152-88-8P 74152-89-9P 74152-90-2P  
 135066-27-2P 135066-28-3P 135066-29-4P  
 135066-30-7P 135066-31-8P 135066-32-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 17049-63-7 HCAPLUS  
 CN 3H-Indazol-3-one, 2-(4-chlorophenyl)-1,2-dihydro- (CA INDEX NAME)

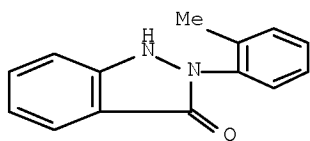


RN 17049-65-9 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)

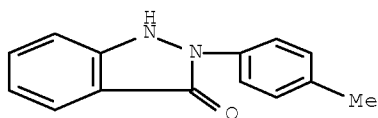


RN 74152-87-7 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-(2-methylphenyl)- (CA INDEX NAME)

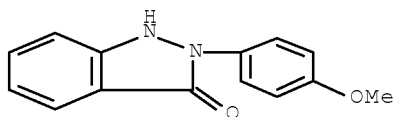




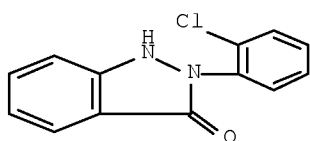
RN 74152-88-8 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-2-(4-methylphenyl)- (CA INDEX NAME)



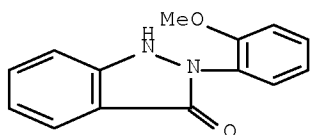
RN 74152-89-9 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-2-(4-methoxyphenyl)- (CA INDEX NAME)



RN 74152-90-2 HCAPLUS  
CN 3H-Indazol-3-one, 2-(2-chlorophenyl)-1,2-dihydro- (CA INDEX NAME)

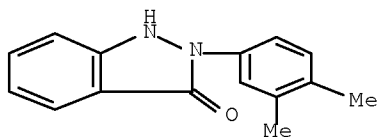


RN 135066-27-2 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-2-(2-methoxyphenyl)- (CA INDEX NAME)



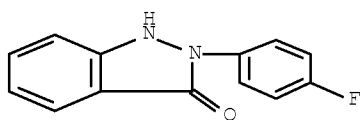
RN 135066-28-3 HCAPLUS

CN 3H-Indazol-3-one, 2-(3,4-dimethylphenyl)-1,2-dihydro- (CA INDEX NAME)



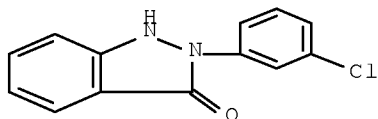
RN 135066-29-4 HCAPLUS

CN 3H-Indazol-3-one, 2-(4-fluorophenyl)-1,2-dihydro- (CA INDEX NAME)



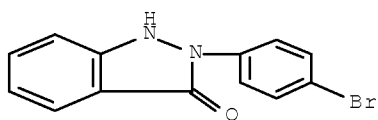
RN 135066-30-7 HCAPLUS

CN 3H-Indazol-3-one, 2-(3-chlorophenyl)-1,2-dihydro- (CA INDEX NAME)



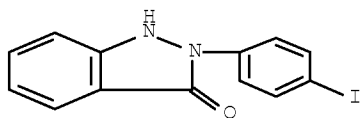
RN 135066-31-8 HCAPLUS

CN 3H-Indazol-3-one, 2-(4-bromophenyl)-1,2-dihydro- (CA INDEX NAME)



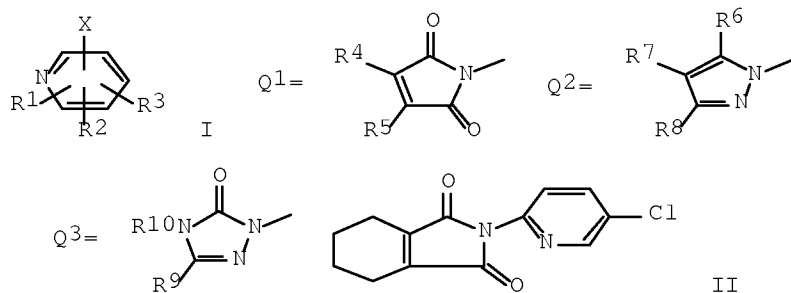
RN 135066-32-9 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-(4-iodophenyl)- (CA INDEX NAME)



L5 ANSWER 50 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1991:164251 HCAPLUS Full-text  
 DOCUMENT NUMBER: 114:164251  
 ORIGINAL REFERENCE NO.: 114:27789a,27792a  
 TITLE: Preparation of azolyipyridines as herbicides  
 INVENTOR(S): Andree, Roland; Busse, Ulrich; Kirsten, Rolf; Santel, Hans Joachim; Luerksen, Klaus; Schmidt, Robert R.  
 PATENT ASSIGNEE(S): Bayer A.-G., Germany  
 SOURCE: Ger. Offen., 19 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3917469	A1	19901206	DE 1989-3917469	19890530 <--
PRIORITY APPLN. INFO.:			DE 1989-3917469	19890530 <--
OTHER SOURCE(S): CASREACT 114:164251; MARPAT 114:164251				
ED Entered STN: 03 May 1991				
GI				



AB The title compds. [I; R1 = H, halo; R2 = H, halo, cyano, NO<sub>2</sub>, alkyl, haloalkyl, alkoxy, haloalkoxy; R3 = H, halo, OH, SH, amino, (substituted) alkyl, alkoxy, alkylthio; R4, R5 = H, halo, (halo)alkyl; R4R5 = alkylene; R6 = H, OH, halo, (halo)alkyl (halo)alkoxy, alkylthio; R7 = H, cyano, NO<sub>2</sub>, halo, (halo)alkyl; R8 = H, (halo)alkyl; R7R8 = alkylene; R9 = H, alkyl, haloalkyl, cycloalkyl, alkenyl, alkynyl; R10 = H, alkyl, haloalkyl, alkenyl, alkynyl; R9R10 = alkylene], were prepared as herbicides (no data). Thus, a mixture of 3,4,5,6-tetrahydrophthalic anhydride and 2-amino-5-chloropyridine was refluxed 8 h in HOAc to give 72% title compound II. Several I were said to show very good activity against dicotyledonous weeds.

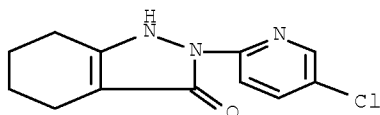
IT 133048-32-5F

Serial No.:11/880,002

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as herbicide intermediate)

RN 133048-32-5 HCAPLUS

CN 3H-Indazol-3-one, 2-(5-chloro-2-pyridinyl)-1,2,4,5,6,7-hexahydro- (CA  
INDEX NAME)

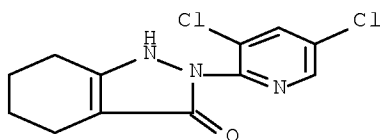


IT 133048-33-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, in preparation of herbicide)

RN 133048-33-6 HCAPLUS

CN 3H-Indazol-3-one, 2-(3,5-dichloro-2-pyridinyl)-1,2,4,5,6,7-hexahydro- (CA  
INDEX NAME)



L5 ANSWER 51 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:122148 HCAPLUS Full-text

DOCUMENT NUMBER: 114:122148

ORIGINAL REFERENCE NO.: 114:20805a,20808a

TITLE: Indazolinones, a new series of redox-active  
5-lipoxygenase inhibitors with built-in selectivity  
and oral activity

AUTHOR(S): Bruneau, P.; Delvare, C.; Edwards, M. P.; McMillan, R.  
M.

CORPORATE SOURCE: Cent. Rech., ICI Pharma, Reims, 51100, Fr.

SOURCE: Journal of Medicinal Chemistry (1991),  
34(3), 1028-36

CODEN: JMCMAR; ISSN: 0022-2623

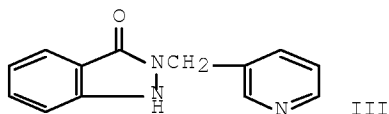
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 114:122148

ED Entered STN: 06 Apr 1991

GI



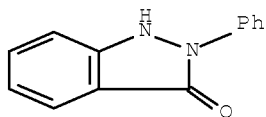
AB Since the hypothetical mechanisms of hydroperoxydation of archidonic acid by, resp., 5-lipoxygenase (I) and cyclooxygenase (II) involve a redox cycle, a compound which reduces I and II to their inactive state would give a nonselective inhibitor of both enzymes. Structural modifications of such a compound may give improved potency and selectivity for I and oral activity. Such an approach has led to the discovery of 1,2-dihydroindazol-3-ones which are potent inhibitors of I with various degrees of selectivity. Structure-activity relationship studies indicated that while N-1, N-2-unsubstituted and N-1-substituted derivs. are orally inactive, N-2-alkyl derivs. are orally active and inhibit both I and II. In contrast, N-2-benzyl derivs. are selective for I but possess only weak oral activity. Further structural modifications have identified ICI 207968 [1,2-dihydro-2-(3-pyridylmethyl)-3H-indazolin-3-one, III] which combines potent oral activity and high selectivity. MetHb (MHb) induction by III in dog blood precluded its development for clin. use. Attempts at dissociating inhibitory properties and MHb formation showed that MHb formation in vitro seemed to be related to the redox potential of the compds. whereas inhibition of I was not. This study led to a series of 4-(N-n-pentylcarbamoyl)indazolinones which maintained in vitro lipoxygenase potency but did not induce MHb.

IT 17049-65-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(redox potential and lipoxygenase inhibition by, cyclooxygenase inhibition in relation to)

RN 17049-65-9 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 52 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:631370 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 113:231370

ORIGINAL REFERENCE NO.: 113:39041a,39044a

TITLE: Preparation of 2-(2-fluorophenyl)-3-chloro-4,5,6,7-tetrahydroindazoles as herbicides

INVENTOR(S): Rueb, Lothar; Eicken, Karl; Plath, Peter; Westphalen, Karl Otto; Wuerzer, Bruno

PATENT ASSIGNEE(S): BASF A.-G., Germany

SOURCE: Ger. Offen., 33 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
DE 3901550	A1	19900726	DE 1989-3901550	19890120 <--
CA 2006029	A1	19900720	CA 1989-2006029	19891219 <--
CA 2006029	C	19990105		

## Serial No.:11/880,002

US 4997472	A	19910305	US 1989-457973	19891227 <--
EP 379099	A1	19900725	EP 1990-100659	19900113 <--
EP 379099	B1	19940914		

R: BE, CH, DE, ES, FR, GB, IT, LI, NL

JP 02229172	A	19900911	JP 1990-8552	19900119 <--
HU 53616	A2	19901128	HU 1990-209	19900119 <--
HU 213180	B	19970328		
US 5167690	A	19921201	US 1990-592906	19901004 <--
US 5112383	A	19920512	US 1991-749352	19910823 <--

PRIORITY APPLN. INFO.:

DE 1989-3901550	A	19890120 <--
US 1989-457973	A3	19891227 <--
US 1990-592906	B3	19901004 <--

OTHER SOURCE(S): MARPAT 113:231370

ED Entered STN: 22 Dec 1990

GI For diagram(s), see printed CA Issue.

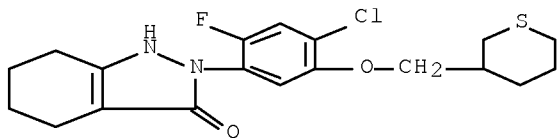
AB The title compds. (I and II; R1 = halo; R2 = alkoxy carbonylalkenyl, alkoxy carbonylalkyl, heterocyclalkyl; R3 = alkyl, alkenyl, alkynyl, heterocyclalkyl, alkoxy carbonylalkenyl, heterocyclalkyl, alkoxy carbonylalkenyl, heterocyclalkyl), were prepared Thus, a mixture of 3-chloro-2-(4-chloro-2-fluoro-5-hydroxyphenyl)-4,5,6,7-tetrahydroindazole, K<sub>2</sub>CO<sub>3</sub>, NaI, and 3-chloromethyl-5,6-dihydro-3H-pyran was stirred 12 h in DMF to give 84% III. Several I and II at 0.03 kg/ha postemergent are said to give good control of broadleaf weeds.

IT 130640-45-8F

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as herbicide intermediate)

RN 130640-45-8 HCAPLUS

CN 3H-Indazol-3-one, 2-[4-chloro-2-fluoro-5-[(tetrahydro-2H-thiopyran-3-yl)methoxy]phenyl]-1,2,4,5,6,7-hexahydro- (CA INDEX NAME)



L5 ANSWER 53 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:631369 HCAPLUS Full-text

DOCUMENT NUMBER: 113:231369

ORIGINAL REFERENCE NO.: 113:39041a,39044a

TITLE: Preparation of N-phenyltetrahydroindazoles as  
herbicides

INVENTOR(S): Rueb, Lothar; Eicken, Karl; Plath, Peter; Westphalen,  
Karl Otto; Wuerzer, Bruno

PATENT ASSIGNEE(S): BASF A.-G., Germany

SOURCE: Ger. Offen., 30 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

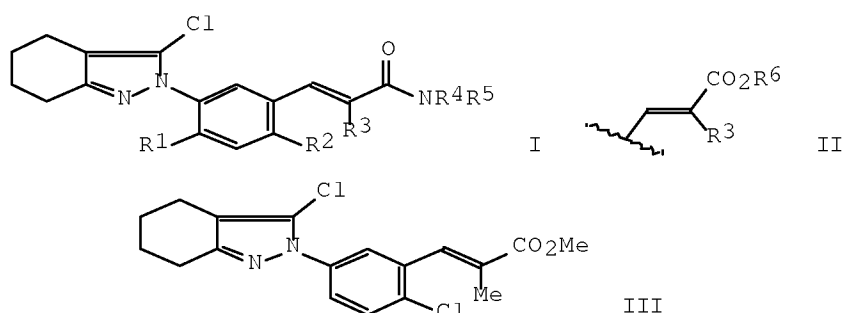
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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DE 3901705	A1	19900726	DE 1989-3901705	19890121 <--

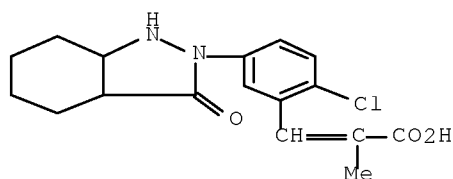
Serial No.:11/880,002

CA 2007172	A1	19900721	CA 1990-2007172	19900104 <--
CA 2007172	C	19981201		
US 4990174	A	19910205	US 1990-462704	19900109 <--
EP 379911	A1	19900801	EP 1990-100662	19900113 <--
EP 379911	B1	19921202		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
ES 2046538	T3	19940201	ES 1990-100662	19900113 <--
HU 53617	A2	19901128	HU 1990-210	19900119 <--
HU 206324	B	19921028		
JP 02229170	A	19900911	JP 1990-10773	19900122 <--
PRIORITY APPLN. INFO.:			DE 1989-3901705	A 19890121 <--
OTHER SOURCE(S):	MARPAT 113:231369			
ED Entered STN:	22 Dec 1990			
GI				



AB The title compds. [I and II; R1 = H, F; R2 = halo; R3 = H, halo, alkyl; R4, R5 = H, (OH-, alkoxy-, or alkylthio)alkyl, alkoxy, alkenyl, alkynyl, alkenyloxy, alkynyloxy; R4R5N = heterocyclyl; R6 = H, (alkoxy)alkyl, alkenyl, alkynyl, PhCH2], were prepared Thus, aqueous NaNO2 was added to a mixture of 2-chloro-5-amino- $\alpha$ -methylcinnamic acid, HOAc, and concentrate HCl at 0-5°. After 30 min, concentrate HCl and SnCl2 in concentrate HCl were added and the mixture was stirred 12 h at room temperature to give 100% E/Z mixture of 3-(2-carboxy-1-propenyl)-4-chlorophenylhydrazine. The latter was refluxed 6 h with Et cyclohexane-2-carboxylate and NaOAc in HOAc to give 35% E/Z 2-[3-(2-carboxy-1-propenyl)-4-chlorophenyl]-1,2,4,6,7-hexahydro-3H-indazol-3-one. The latter in DMF was stirred with POCl3 at 25° for 30 min and at reflux for 1 h; MeOH and pyridine were added followed by stirring for 12 h at room temperature to give the title compound III. III at 0.06 kg/ha postemergent gave good control of broadleaf weeds while leaving *Triticum aestivum* unaffected.

IT 130721-28-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and chlorination of)  
 RN 130721-28-7 HCAPLUS  
 CN 2-Propenoic acid, 3-[2-chloro-5-(octahydro-3-oxo-2H-indazol-2-yl)phenyl]-2-methyl- (CA INDEX NAME)



L5 ANSWER 54 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:449726 HCAPLUS Full-text

DOCUMENT NUMBER: 113:49726

ORIGINAL REFERENCE NO.: 113:8277a,8280a

TITLE: Spectrally sensitized silver halide photographic material with an anti-irradiation dye having good wash-out characteristics

INVENTOR(S): Yoshida, Kazuhiro; Usagawa, Yasushi; Kagawa, Nobuaki

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01253735	A	19891011	JP 1988-81726	19880401 <--
PRIORITY APPLN. INFO.:			JP 1988-81726	19880401 <--

OTHER SOURCE(S): MARPAT 113:49726

ED Entered STN: 03 Aug 1990

GI For diagram(s), see printed CA Issue.

AB The claimed photog. material has (1)  $\geq 1$  Ag halide emulsion layer(s) containing Ag halide grains spectrally sensitized with  $\geq 1$  of cationic tricarbocyanine and/or cationic dicarbocyanine dyes and (2)  $\geq 1$  hydrophilic colloid layer(s) containing  $\geq 1$  dye of the formula I (A, B = heterocyclic or carbon ring; n = 3, 4; L = methyne). The dye is easily washed out and leaves no unfavorable stain after processing, and is photog. inert. Therefore, the photog. material is suitable for recording of laser beam image. Thus, (a) Ag(Br, Cl) emulsion (AgBr 35 mol%) sensitized by the IR spectral sensitizer II, (b) an antihalation coating solution containing dye III, a fluorescent whitener and other additives, (c) a protective coating solution were coated on a polyethylene-laminated paper sheet to make a black-and-white paper for laser beam recording. It had the mentioned advantages.

IT 128227-79-2

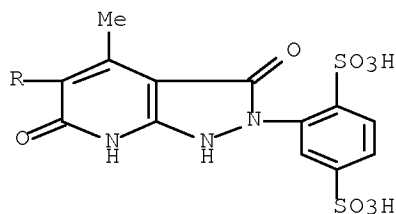
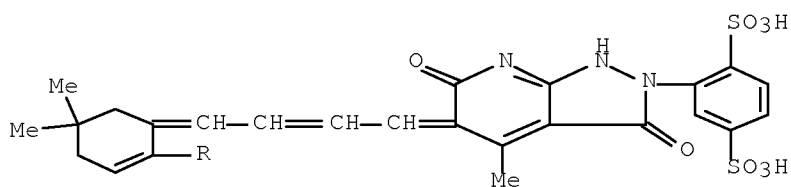
RL: USES (Uses)

(dye, photog. material emulsion layer containing)

RN 128227-79-2 HCAPLUS

CN 1,4-Benzenedisulfonic acid, 2-[5-[3-[4-[2-(2,5-disulfophenyl)-1,2,3,6-tetrahydro-4-methyl-3,6-dioxo-5H-pyrazolo[3,4-b]pyridin-5-ylidene]-2-butenylidene]-5,5-dimethyl-1-cyclohexen-1-yl]-1,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]-, tetrasodium salt (9CI) (CA INDEX NAME)

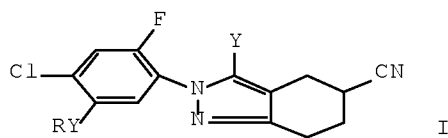




4 Na

L5 ANSWER 55 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1990:419461 HCAPLUS Full-text  
 DOCUMENT NUMBER: 113:19461  
 ORIGINAL REFERENCE NO.: 113:3277a,3280a  
 TITLE: Preparation of 5-cyano-4,5,6,7-tetrahydro-2H-indazoles  
 as selective herbicides  
 INVENTOR(S): Moriyasu, Koichi; Fujiwara, Junya; Nishida, Makoto;  
 Inoue, Norio  
 PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01305065	A	19891208	JP 1988-134447	19880602 <--
PRIORITY APPLN. INFO.:			JP 1988-134447	19880602 <--
OTHER SOURCE(S):	MARPAT	113:19461		
ED Entered STN:		21 Jul 1990		
GI				



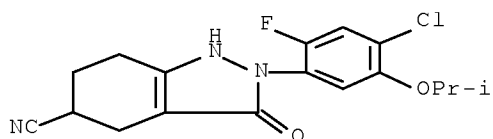
AB Selective herbicides, useful for rice and wheat, contain 5-cyano-4,5,6,7-tetrahydro-2H-indazoles I (R = lower alkyl, propargyl; X = Me, Cl; Y = O, S) as active ingredients. 4-Chloro-2-fluoro-5-propargyloxyphenylhydrazine was treated with 2-acetyl-4-cyanocyclohexanone in toluene under reflux for 10 h, while removing H<sub>2</sub>O, to give 91% I (R = propargyl, X = Me, Y = O), which (1 kg/ha) controlled *Pharbitis nil*, *Amaranthus retroflexus*, *Stellaria media*, *Capsella bursa-pastoris*, *Panicum crus-galli*, and *Digitaria adscendens* with no damage to corn and rice.

IT 127682-22-8

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with phosphorus oxychloride and dimethylaniline)

RN 127682-22-8 HCAPLUS

CN 1H-Indazole-5-carbonitrile, 2-[4-chloro-2-fluoro-5-(1-methylethoxy)phenyl]-2,3,4,5,6,7-hexahydro-3-oxo- (CA INDEX NAME)



L5 ANSWER 56 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:151254 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 112:151254

ORIGINAL REFERENCE NO.: 112:25347a,25350a

TITLE: 2-Substituted indazolinones: orally active and selective 5-lipoxygenase inhibitors with anti-inflammatory activity

AUTHOR(S): Foster, S. J.; Bruneau, P.; Walker, E. R. H.; McMillan, R. M.

CORPORATE SOURCE: Res. Dep., ICI Pharm., Macclesfield/Cheshire, SK10 4TG, UK

SOURCE: British Journal of Pharmacology (1990), 99(1), 113-18

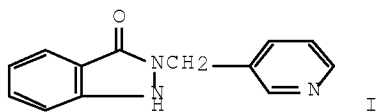
CODEN: BJPCBM; ISSN: 0007-1188

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 28 Apr 1990

GI



AB The pharmacol. profile of ICI207968 (I) a novel, orally active and selective inhibitor of 5-lipoxygenase is described. Inhibition of leukotriene B<sub>4</sub> (LTB<sub>4</sub>) synthesis by 2-substituted indazolinones was not directly related to redox potential but was critically dependent on the nature of the N<sub>2</sub> substituent. 2-(3-Pyridylmethyl)indazolinone (ICI207968) combined selectivity and oral potency. In several in vitro systems ICI207968 exhibited similar lipoxygenase inhibitory potency (IC<sub>50</sub> values from 1.5 to 6.0 μM) and was approx. 300 times less potent against cyclooxygenase, as measured by inhibition of PGE<sub>2</sub> synthesis. ICI207968 also produced selective lipoxygenase inhibition following oral administration in the rat. ED<sub>50</sub> values of 2.5, 10 and 25 mg/kg orally for inhibition of LTB<sub>4</sub> release from A23187-stimulated blood were obtained 1, 3 and 5 h after dosing. The compound did not inhibit PGE<sub>2</sub> synthesis at oral doses up to 300 mg/kg. Coadministration of ICI207968 with arachidonic acid, into rabbit dermis, potently inhibited both plasma extravasation and polymorphonuclear leukocyte infiltration induced by this inflammatory fatty acid. The anti-inflammatory potency of a number of intradermally administered indazolinones, with similar redox potentials, was related to their inhibitory potency against leukotriene generation in blood. Oral administration of ICI207968 (100 mg/kg) in the rabbit inhibited ex vivo leukotriene generation in blood and arachidonic acid-induced skin inflammation. ICI207968 is an orally active and selective inhibitor of 5-lipoxygenase which has anti-inflammatory properties. ICI207968 will be a valuable agent for clarifying the biol. roles of leukotrienes and the therapeutic potential of 5-lipoxygenase inhibitors. 5-Lipoxygenase inhibition by and structure-activity relations of other imidazolinones are described.

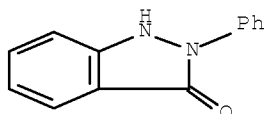
IT 17049-65-9

RL: BIOL (Biological study)

(as lipoxygenase inhibitor, antiinflammatory activity of, LTB<sub>4</sub> formation inhibition and structure in relation to)

RN 17049-65-9 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 57 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:574127 HCAPLUS Full-text

DOCUMENT NUMBER: 111:174127

ORIGINAL REFERENCE NO.: 111:29015a,29018a

TITLE: Preparation of heterocyclyloxobenzazoles and -azines as herbicides

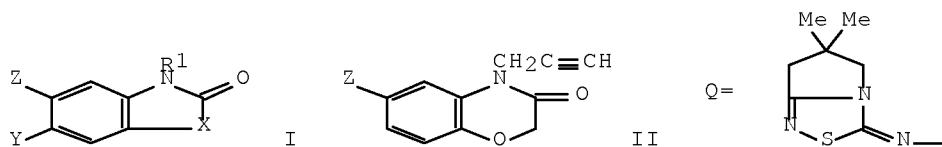
INVENTOR(S): Ganzer, Michael; Franke, Wilfried; Dorfmeister, Gabrielle; Johann, Gerhard; Arndt, Friedrich; Rees,

Serial No.:11/880,002

PATENT ASSIGNEE(S): Richard  
 SOURCE: Schering A.-G., Fed. Rep. Ger.  
 Eur. Pat. Appl., 43 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 311135	A2	19890412	EP 1988-116762	19881010 <--
EP 311135	A3	19890906		
EP 311135	B1	19930602		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
DE 3734745	A1	19890420	DE 1987-3734745	19871009 <--
IL 87887	A	19930404	IL 1988-87887	19880930 <--
DD 282847	A5	19900926	DD 1988-320543	19881006 <--
SU 1722204	A3	19920323	SU 1988-4356592	19881006 <--
DK 8805634	A	19890410	DK 1988-5634	19881007 <--
FI 8804625	A	19890410	FI 1988-4625	19881007 <--
FI 92585	B	19940831		
FI 92585	C	19941212		
AU 8823568	A	19890413	AU 1988-23568	19881007 <--
AU 614775	B2	19910912		
BR 8805182	A	19890523	BR 1988-5182	19881007 <--
JP 01157977	A	19890621	JP 1988-252230	19881007 <--
JP 2765873	B2	19980618		
ZA 8807559	A	19890628	ZA 1988-7559	19881007 <--
HU 49356	A2	19890928	HU 1988-5224	19881007 <--
HU 207330	B	19930329		
CN 1032479	A	19890426	CN 1988-109124	19881008 <--
AT 90091	T	19930615	AT 1988-116762	19881010 <--
ES 2058206	T3	19941101	ES 1988-116762	19881010 <--
PRIORITY APPLN. INFO.:			DE 1987-3734745	A 19871009 <--
			EP 1988-116762	A 19881010 <--

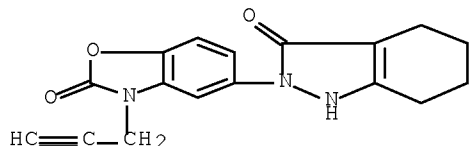
OTHER SOURCE(S): CASREACT 111:174127; MARPAT 111:174127  
 ED Entered STN: 10 Nov 1989  
 GI



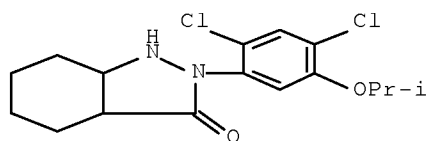
AB The title compds. [I; R1 = H, (un)substituted C1-5 alkyl, C3-5 alkenyl, etc.; X = (CR2R3)nW, CR2:V in which V and W are bound to Ph-moiety; V = CR1, N; W = CR4R5, NR6, O, S; R2-R5 = H, halo, C1-3 (halo)alkyl; R6 = H, Me, halomethyl; Y = H, F, Cl; Z = 1 specific and 7 general heterocyclyl; n = 0, 1] were prepared  
 Aminobenzoxazinone II (Z = NH2) was stirred 10 h with Cl2CS in CH2Cl2 containing CaCO3 to give 84% II (Z = NCS) which was added at 5° to a solution of 2-amino-4,4-dimethyl-1-pyrroline in CH2Cl2 and the whole stirred 3 h with

warming to 20° whereupon the solution was cooled to -20°, Br added, and stirring continued 1 h with warming to 10° to give 25% II (Z = pyrrolothiadiazolyldeneimino group Q) which gave complete kill of 9 weeds and no effect on wheat at 0.1 kg/ha postemergent.

IT 123250-04-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of, in preparation of herbicides)  
 RN 123250-04-4 HCAPLUS  
 CN 3H-Indazol-3-one, 2-[2,3-dihydro-2-oxo-3-(2-propynyl)-5-benzoxazolyl]-1,2,4,5,6,7-hexahydro- (9CI) (CA INDEX NAME)

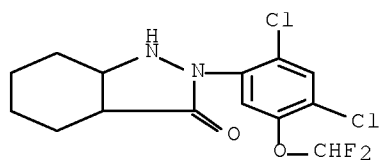


L5 ANSWER 58 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1989:548777 HCAPLUS Full-text  
 DOCUMENT NUMBER: 111:148777  
 ORIGINAL REFERENCE NO.: 111:24721a,24724a  
 TITLE: Synthesis and biological activity of cyclic imide derivatives and related compounds  
 AUTHOR(S): Ando, Iwao; Ohtsuka, Toshikazu; Miki, Nobuo; Takahashi, Toshio; Hayase, Yoshio; Hayashi, Yoshiyuki  
 CORPORATE SOURCE: Aburahi Lab., Shionogi and Co., Ltd., Shiga, 520-34, Japan  
 SOURCE: Agricultural and Biological Chemistry (1989), 53(7), 2001-3  
 CODEN: ABCHA6; ISSN: 0002-1369  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ED Entered STN: 28 Oct 1989  
 AB Cyclic imides (imidazoles, phthalimides, phthalamates, isophthalimides) were prepared and their growth-inhibiting activity (in Lemna pausicostata) was related to their structure. All these compds. showed extremely high growth-inhibiting activity with duckweed, equal or better than oxadiazon. The imidazole series showed the highest activity. The activity was dependent on the structure of the imide moiety and on the substituents of the aryl moiety.  
 IT 122855-10-1P 122855-11-2P 122855-12-3P  
 122855-13-4P 122855-14-5P 122855-15-6P  
 122881-58-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and chlorination of)  
 RN 122855-10-1 HCAPLUS  
 CN 3H-Indazol-3-one, 2-[2,4-dichloro-5-(1-methylethoxy)phenyl]octahydro- (CA INDEX NAME)



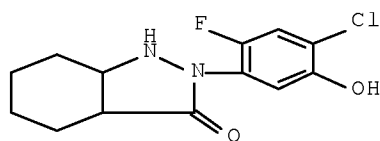
RN 122855-11-2 HCAPLUS

CN 3H-Indazol-3-one, 2-[2,4-dichloro-5-(difluoromethoxy)phenyl]octahydro-  
(CA INDEX NAME)



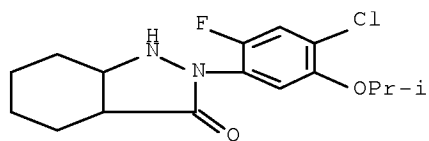
RN 122855-12-3 HCAPLUS

CN 3H-Indazol-3-one, 2-(4-chloro-2-fluoro-5-hydroxyphenyl)octahydro- (CA  
INDEX NAME)



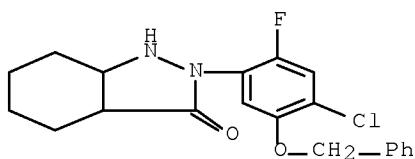
RN 122855-13-4 HCAPLUS

CN 3H-Indazol-3-one, 2-[4-chloro-2-fluoro-5-(1-methylethoxy)phenyl]octahydro-  
(CA INDEX NAME)

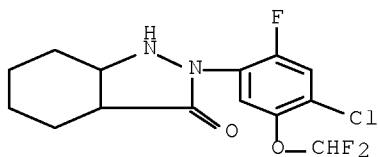


RN 122855-14-5 HCAPLUS

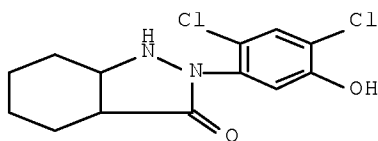
CN 3H-Indazol-3-one, 2-[4-chloro-2-fluoro-5-(phenylmethoxy)phenyl]octahydro-  
(CA INDEX NAME)



RN 122855-15-6 HCAPLUS

CN 3H-Indazol-3-one, 2-[4-chloro-5-(difluoromethoxy)-2-fluorophenyl]octahydro-  
(CA INDEX NAME)

RN 122881-58-7 HCAPLUS

CN 3H-Indazol-3-one, 2-(2,4-dichloro-5-hydroxyphenyl)octahydro- (CA INDEX  
NAME)

L5 ANSWER 59 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:448001 HCAPLUS Full-text

DOCUMENT NUMBER: 111:48001

ORIGINAL REFERENCE NO.: 111:8005a,8008a

TITLE: Direct-positive silver halide light-sensitive color  
photographic material

INVENTOR(S): Yoshizawa, Tomoni; Ogi, Keiji; Kamitakahara, Atushi

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Eur. Pat. Appl., 41 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
EP 304323	A2	19890222	EP 1988-307712	19880819 <--
EP 304323	A3	19900131		
EP 304323	B1	19951108		
R: DE, FR, GB, IT, NL				

Serial No.:11/880,002

JP 01050042	A	19890227	JP 1987-207906	19870820 <--
JP 2579168	B2	19970205		
US 4925780	A	19900515	US 1988-234023	19880818 <--
PRIORITY APPLN. INFO.:			JP 1987-207906	A 19870820 <--
ED Entered STN: 05 Aug 1989				
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

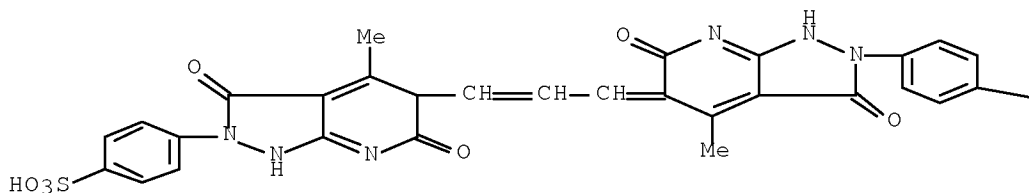
AB A direct-pos. Ag halide color photog. material is described comprising  $\geq 3$  light-sensitive layers containing internal latent image-type Ag halide grains, specific cyanine-type sensitizing dyes, and  $\geq 1$  cyanine-type antiirradn. dye. The material has wide light-fogging latitude and highly stable developability. Thus, a photog. paper was produced with 4 different Ag halide emulsion layers containing I, II, III, and IV, and one of them containing V. The material had a high fogging exposure latitude.

IT 121533-35-5  
RL: USES (Uses)  
(direct-pos. color photog. material with emulsion containing, for improved fogging exposure latitude)

RN 121533-35-5 HCAPLUS

CN Benzenesulfonic acid, 4-[1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-5-[3-[1,2,3,6-tetrahydro-4-methyl-3,6-dioxo-2-(4-sulfophenyl)-5H-pyrazolo[3,4-b]pyridin-5-ylidene]-1-propenyl]-2H-pyrazolo[3,4-b]pyridin-2-yl]-, dipotassium salt (9CI) (CA INDEX NAME)

PAGE 1-A



● 2 K

PAGE 1-B

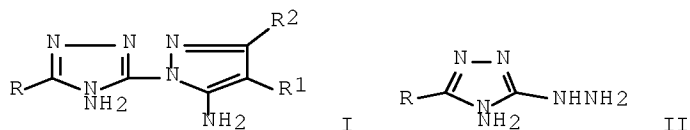
—SO<sub>3</sub>H

L5 ANSWER 60 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1989:439268 HCAPLUS Full-text  
DOCUMENT NUMBER: 111:39268  
ORIGINAL REFERENCE NO.: 111:6685a,6688a

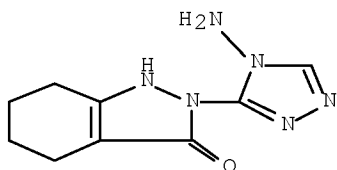


Serial No.:11/880,002

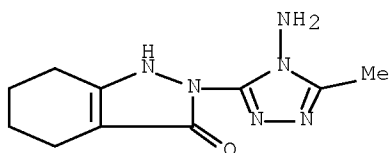
TITLE: Chemotherapeutic agents. XV. Synthesis of  
4-amino-3-pyrazolyl-1,2,4-triazoles as antimicrobial  
agents  
AUTHOR(S): Ram, Vishnu J.; Mishra, Lallan; Kushwaha, D. S.  
CORPORATE SOURCE: Med. Chem. Div., CDRI, Lucknow, 226001, India  
SOURCE: Archiv der Pharmazie (Weinheim, Germany) (1989  
, 322(2), 63-6  
CODEN: ARPMAS; ISSN: 0365-6233  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 111:39268  
ED Entered STN: 05 Aug 1989  
GI



AB Pyrazolyltriazoles I (R = H, Me; R1 = cyano, CO2Me, CO2Et; R2 = H, SMe) and  
some related compds. were prepared from hydrazinotriazoles II. I (R = H, Me;  
R1 = cyano, CO2Et; R2 = H) were converted to their hydrazones with 3-R3C6H4CHO  
(R3 = Cl, OMe). None of the products had any bactericidal or fungicidal  
activity.  
IT 121378-84-5P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); SPN (Synthetic preparation); BIOL (Biological  
study); PREP (Preparation)  
(preparation and bactericidal and fungicidal activity of)  
RN 121378-84-5 HCAPLUS  
CN 3H-Indazol-3-one, 2-(4-amino-4H-1,2,4-triazol-3-yl)-1,2,4,5,6,7-hexahydro-  
(CA INDEX NAME)

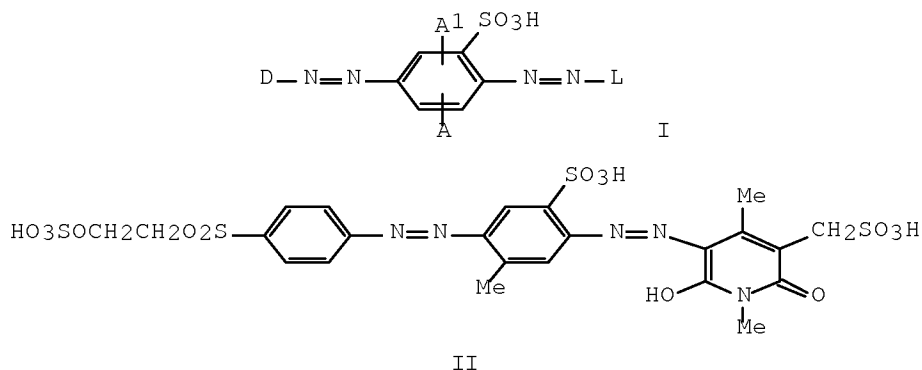


IT 121378-85-6P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 121378-85-6 HCAPLUS  
CN 3H-Indazol-3-one, 2-(4-amino-5-methyl-4H-1,2,4-triazol-3-yl)-1,2,4,5,6,7-  
hexahydro- (CA INDEX NAME)



L5 ANSWER 61 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1989:214752 HCAPLUS Full-text  
 DOCUMENT NUMBER: 110:214752  
 ORIGINAL REFERENCE NO.: 110:35641a,35644a  
 TITLE: Polyazo and disazo reactive dyes and their use  
 INVENTOR(S): Herd, Karl Josef  
 PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.  
 SOURCE: Eur. Pat. Appl., 28 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 292825	A2	19881130	EP 1988-107805	19880516 <--
EP 292825	A3	19890308		
EP 292825	B1	19910807		
R: CH, DE, FR, GB, LI				
DE 3717814	A1	19881208	DE 1987-3717814	19870527 <--
US 5093484	A	19920303	US 1988-196168	19880518 <--
JP 63309560	A	19881216	JP 1988-124040	19880523 <--
PRIORITY APPLN. INFO.:			DE 1987-3717814	A 19870527 <--
OTHER SOURCE(S):	MARPAT 110:214752			
ED Entered STN:	10 Jun 1989			
GI				



AB Disazo reactive dyes I [A, A1 = H, Cl-4 alkyl, Cl-4 alkoxy, halogen; D = fiber-reactive group-containing (un)substituted Ph or naphthyl residue; L = coupling component residue], useful for dyeing or printing hydroxyl and/or

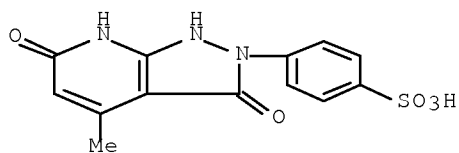
carbonamide group-containing fabrics, are prepared 4'-( $\beta$ -Hydroxyethylsulfonyl)-2-methyl-4-aminoazobenzene was sulfonated with oleum and the intermediate diazotized and coupled with 3-(aminocarbonyl)-1,4-dimethyl-5-sulfomethyl-6-hydroxy-2-pyridone Na salt, forming II,  $\lambda_{\max}$  455 nm, which dyed wool in a fast orange-yellow shade.

IT 86104-85-0

RL: RCT (Reactant); RACT (Reactant or reagent)  
(coupling of, with diazotized (sulfatoethylsulfonyl)methylsulfoaminoazo benzene)

RN 86104-85-0 HCAPLUS

CN Benzenesulfonic acid, 4-(1,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl)- (CA INDEX NAME)

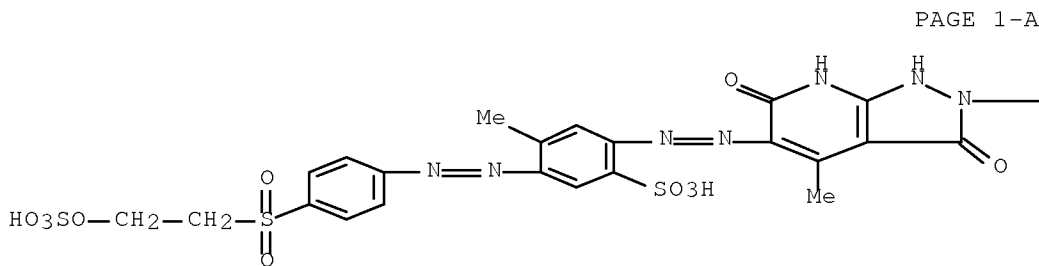


IT 119894-83-6P

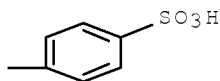
RL: PREP (Preparation)  
(manufacture of, as reactive brown dye)

RN 119894-83-6 HCAPLUS

CN Benzenesulfonic acid, 4-methyl-5-[[4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]azo]-2-[[2,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2-(4-sulfophenyl)-1H-pyrazolo[3,4-b]pyridin-5-yl]azo]- (9CI) (CA INDEX NAME)



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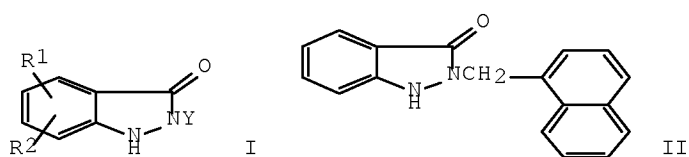


PAGE 1-B

Serial No.:11/880,002

ORIGINAL REFERENCE NO.: 110:32009a,32012a  
 TITLE: Preparation of 1,2-dihydro-3H-indazol-3-ones as  
 lipoxygenase inhibitors.  
 INVENTOR(S): Bruneau, Pierre Andre Raymond; Carey, Frank; Delvare,  
 Christian Robert Ernest; Gibson, Keith Hopkinson;  
 McMillan, Rodger Martin  
 PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK; ICI Pharma S. A.  
 SOURCE: Eur. Pat. Appl., 90 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 284174	A1	19880928	EP 1988-300281	19880114 <--
EP 284174	B1	19920729		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
IL 84944	A	19920216	IL 1987-84944	19871225 <--
AU 8783175	A	19880721	AU 1987-83175	19871231 <--
AU 606112	B2	19910131		
ZA 8800046	A	19880831	ZA 1988-46	19880105 <--
FI 8800195	A	19880720	FI 1988-195	19880118 <--
NO 8800182	A	19880720	NO 1988-182	19880118 <--
JP 63253069	A	19881020	JP 1988-7096	19880118 <--
DK 8800228	A	19880720	DK 1988-228	19880119 <--
US 5173496	A	19921222	US 1992-863333	19920402 <--
PRIORITY APPLN. INFO.:			EP 1987-400122	A 19870119 <--
			EP 1987-401798	A 19870731 <--
			US 1988-143373	B1 19880113 <--
			US 1990-532348	B1 19900605 <--
OTHER SOURCE(S):			MARPAT 110:192811	
ED Entered STN:			26 May 1989	
GI				



AB Dihydroindazolines I (R<sub>1</sub> = H, halo, NO<sub>2</sub>, OH, C<sub>2</sub>-6 alkanoyloxy, C<sub>1</sub>-6 alkyl, C<sub>1</sub>-6 alkoxy, C<sub>1</sub>-4 fluoroalkyl, C<sub>2</sub>-6 alkanoyl, NH<sub>2</sub>, C<sub>1</sub>-6 alkylamino, di(C<sub>1</sub>-4 alkyl)amino, C<sub>2</sub>-6 alkanoylamino, C<sub>1</sub>-6 hydroxyalkyl; R<sub>2</sub> = H, halo, C<sub>1</sub>-6 alkyl, C<sub>1</sub>-6 alkoxy; Y = wide variety of substituents), many of which are new, are useful as 5-lipoxygenase inhibitors. Reductive cyclization of N-(1-naphthylmethyl)-2-nitrobenzamide by powdered Zn and NaOH in ag. MeOH gave dihydro(naphthylmethyl)indazoline II. In an in vitro assay using heparinized rat blood and challenge by the Ca ionophore A23187, II had IC<sub>50</sub> values of 0.8 μM vs. LTB<sub>4</sub> and 100 μM vs. PGE<sub>2</sub>.

IT 120273-69-0P 120273-73-6P 120273-75-8P  
 120273-83-8P 120273-86-1P 120273-87-2P  
 120273-91-8P 120273-93-0P 120273-94-1P

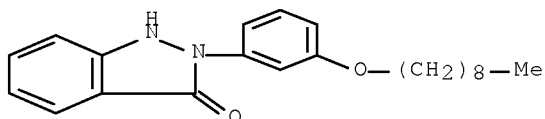
Serial No.:11/880,002

120274-01-3P 120274-04-6P 120274-06-8P  
 120274-07-9P 120274-08-0P 120274-12-6P  
 120274-13-7P 120274-14-8P 120274-16-0P  
 120274-17-1P 120274-64-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of, as lipoxygenase inhibitor)

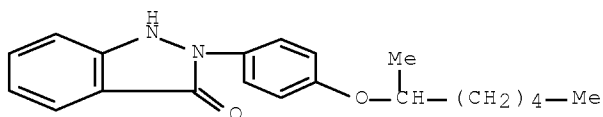
RN 120273-69-0 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-[3-(nonyloxy)phenyl]- (CA INDEX NAME)



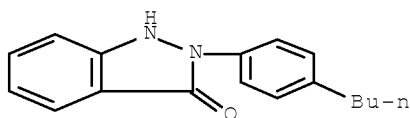
RN 120273-73-6 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-[4-[(1-methylhexyl)oxy]phenyl]- (CA INDEX NAME)



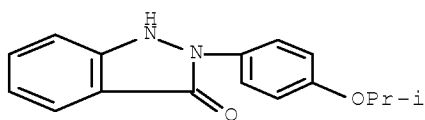
RN 120273-75-8 HCAPLUS

CN 3H-Indazol-3-one, 2-(4-butylphenyl)-1,2-dihydro- (CA INDEX NAME)



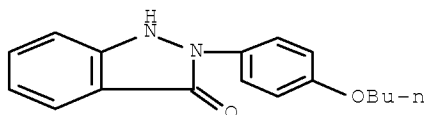
RN 120273-83-8 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-[4-(1-methylethoxy)phenyl]- (CA INDEX NAME)



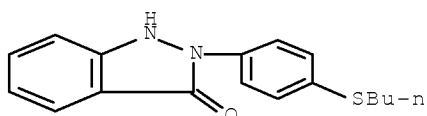
RN 120273-86-1 HCAPLUS

CN 3H-Indazol-3-one, 2-(4-butoxyphenyl)-1,2-dihydro- (CA INDEX NAME)



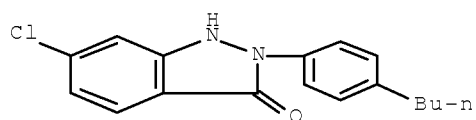
RN 120273-87-2 HCAPLUS

CN 3H-Indazol-3-one, 2-[4-(butylthio)phenyl]-1,2-dihydro- (CA INDEX NAME)



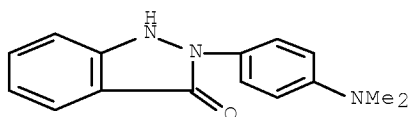
RN 120273-91-8 HCAPLUS

CN 3H-Indazol-3-one, 2-(4-butylphenyl)-6-chloro-1,2-dihydro- (CA INDEX NAME)



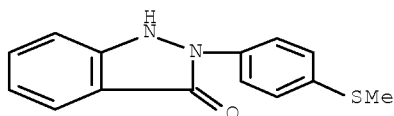
RN 120273-93-0 HCAPLUS

CN 3H-Indazol-3-one, 2-[4-(dimethylamino)phenyl]-1,2-dihydro- (CA INDEX NAME)



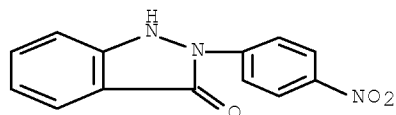
RN 120273-94-1 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-[4-(methylthio)phenyl]- (CA INDEX NAME)



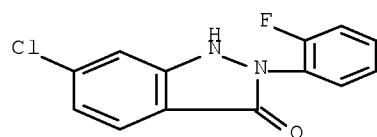
RN 120274-01-3 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-(4-nitrophenyl)- (CA INDEX NAME)



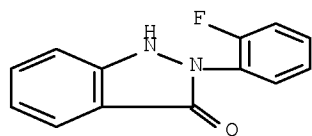
RN 120274-04-6 HCAPLUS

CN 3H-Indazol-3-one, 6-chloro-2-(2-fluorophenyl)-1,2-dihydro- (CA INDEX NAME)



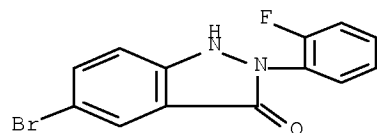
RN 120274-06-8 HCAPLUS

CN 3H-Indazol-3-one, 2-(2-fluorophenyl)-1,2-dihydro- (CA INDEX NAME)



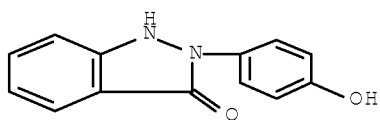
RN 120274-07-9 HCAPLUS

CN 3H-Indazol-3-one, 5-bromo-2-(2-fluorophenyl)-1,2-dihydro- (CA INDEX NAME)

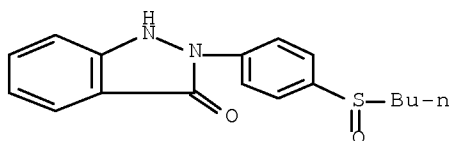


RN 120274-08-0 HCAPLUS

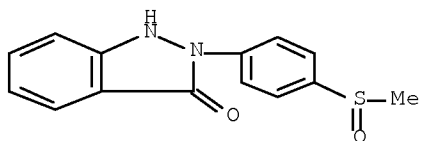
CN 3H-Indazol-3-one, 1,2-dihydro-2-(4-hydroxyphenyl)- (CA INDEX NAME)



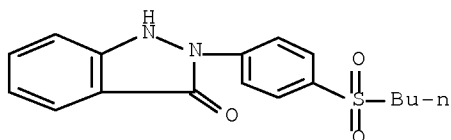
RN 120274-12-6 HCAPLUS  
CN 3H-Indazol-3-one, 2-[4-(butylsulfinyl)phenyl]-1,2-dihydro- (CA INDEX NAME)



RN 120274-13-7 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-2-[4-(methylsulfinyl)phenyl]- (CA INDEX NAME)

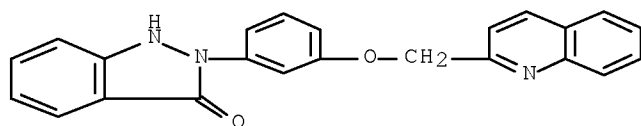


RN 120274-14-8 HCAPLUS  
CN 3H-Indazol-3-one, 2-[4-(butylsulfonyl)phenyl]-1,2-dihydro- (CA INDEX NAME)

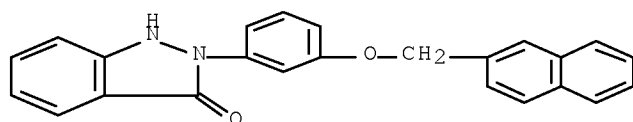


RN 120274-16-0 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-2-[3-(2-quinolinylmethoxy)phenyl]- (CA INDEX NAME)

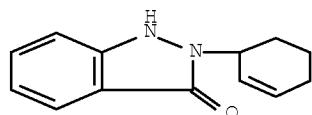




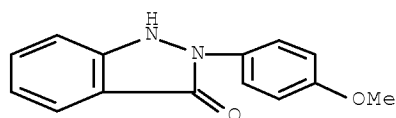
RN 120274-17-1 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-2-[3-(2-naphthalenylmethoxy)phenyl]- (CA INDEX NAME)



RN 120274-64-8 HCAPLUS  
CN 3H-Indazol-3-one, 2-(2-cyclohexen-1-yl)-1,2-dihydro- (CA INDEX NAME)

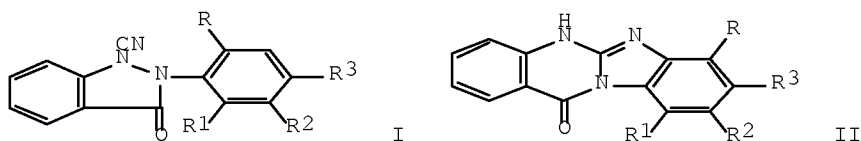


IT 74152-89-9  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, in synthesis of lipxygenase-inhibiting dihydroindazolones)  
RN 74152-89-9 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-2-(4-methoxyphenyl)- (CA INDEX NAME)



L5 ANSWER 63 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1988:492072 HCAPLUS [Full-text](#)  
DOCUMENT NUMBER: 109:92072  
ORIGINAL REFERENCE NO.: 109:15345a,15348a  
TITLE: Thermal rearrangement of 2-aryl-1-cyanoindazol-3-ones  
AUTHOR(S): Bird, C. W.; Kapili, M.  
CORPORATE SOURCE: Dep. Chem., King's Coll., London, W8 7AH, UK

SOURCE: Tetrahedron (1987), 43(20), 4621-4  
 CODEN: TETRAB; ISSN: 0040-4020  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 109:92072  
 ED Entered STN: 17 Sep 1988  
 GI

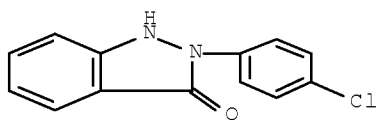


AB 2-Aryl-1-cyanoindazol-3-ones (I; R, R1, R2 = H, Me; R3 = H, Cl, Me, OMe) were prepared, and their thermal rearrangement to the corresponding benzimidazo[2,1-b]quinazolinones (II) was examined. Quant. studies using differential scanning calorimetry provided rates, energies and entropies of activation. The rates of rearrangement of the 2-(p-substituted phenyl) compds. are correlated to the Hammett relationship by using  $\sigma^+$  substituent consts. In the case of the 2-(2,6-dimethylphenyl) and 2-(2,4,6-trimethylphenyl) compds. rearrangement is accompanied by [1,9] sigmatropic shifts of the obstructing Me groups.

IT 17049-63-7 74152-87-7 74152-88-8  
 74152-89-9 74152-91-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cyanation of)

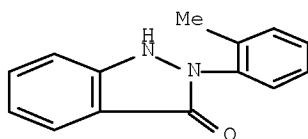
RN 17049-63-7 HCAPLUS

CN 3H-Indazol-3-one, 2-(4-chlorophenyl)-1,2-dihydro- (CA INDEX NAME)



RN 74152-87-7 HCAPLUS

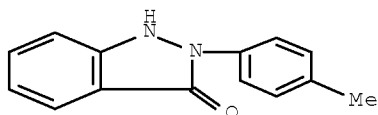
CN 3H-Indazol-3-one, 1,2-dihydro-2-(2-methylphenyl)- (CA INDEX NAME)



Serial No.:11/880,002

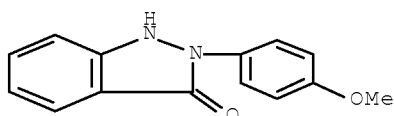
RN 74152-88-8 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-(4-methylphenyl)- (CA INDEX NAME)



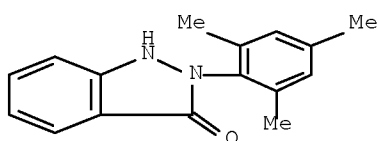
RN 74152-89-9 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-(4-methoxyphenyl)- (CA INDEX NAME)



RN 74152-91-3 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



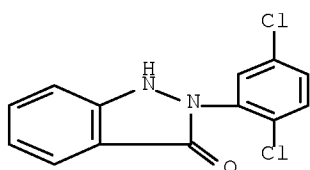
IT 115819-39-1P 115819-40-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and attempted cyanation of)

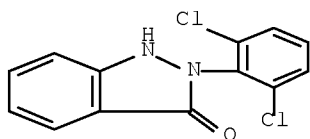
RN 115819-39-1 HCAPLUS

CN 3H-Indazol-3-one, 2-(2,5-dichlorophenyl)-1,2-dihydro- (CA INDEX NAME)

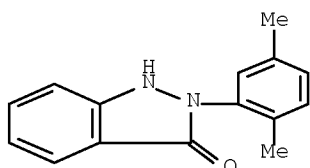


RN 115819-40-4 HCAPLUS

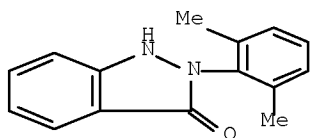
CN 3H-Indazol-3-one, 2-(2,6-dichlorophenyl)-1,2-dihydro- (CA INDEX NAME)



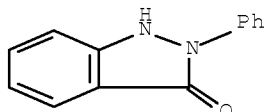
IT 115819-37-9P 115819-38-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and cyanation of)  
 RN 115819-37-9 HCAPLUS  
 CN 3H-Indazol-3-one, 2-(2,5-dimethylphenyl)-1,2-dihydro- (CA INDEX NAME)



RN 115819-38-0 HCAPLUS  
 CN 3H-Indazol-3-one, 2-(2,6-dimethylphenyl)-1,2-dihydro- (CA INDEX NAME)



IT 17049-65-9F  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 17049-65-9 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)

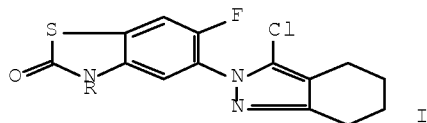


## Serial No.:11/880,002

DOCUMENT NUMBER: 108:37827  
 ORIGINAL REFERENCE NO.: 108:6335a,6338a  
 TITLE: Preparation of chlorofluorobenzothiazolonyltetrahydroindazoles as herbicides  
 INVENTOR(S): Haga, Toru; Nagano, Eiki; Morita, Kouichi; Sato, Ryo  
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 20 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 235567	A2	19870909	EP 1987-101138	19870128 <--
EP 235567	A3	19910109		
EP 235567	B1	19940112		
R: DE, GB, IT				
JP 62238268	A	19871019	JP 1986-79661	19860407 <--
JP 62238284	A	19871019	JP 1986-79662	19860407 <--
JP 06067931	B	19940831		
JP 62238285	A	19871019	JP 1986-79663	19860407 <--
JP 06067932	B	19940831		
JP 62238269	A	19871019	JP 1986-81420	19860409 <--
JP 62238270	A	19871019	JP 1986-81421	19860409 <--
JP 62252787	A	19871104	JP 1987-12846	19870122 <--
JP 07100703	B	19951101		
US 4820333	A	19890411	US 1987-8314	19870129 <--
US 4831150	A	19890516	US 1988-203906	19880608 <--
US 4831149	A	19890516	US 1988-204018	19880608 <--
JP 06321922	A	19941122	JP 1994-248	19940106 <--
JP 2503930	B2	19960605		
PRIORITY APPLN. INFO.:			JP 1986-19044	A 19860129 <--
			JP 1986-79661	A 19860407 <--
			JP 1986-79662	A 19860407 <--
			JP 1986-79663	A 19860407 <--
			JP 1986-81420	A 19860409 <--
			JP 1986-81421	A 19860409 <--
			JP 1987-12846	19870122 <--
			US 1987-8314	A3 19870129 <--

OTHER SOURCE(S): CASREACT 108:37827  
 ED Entered STN: 06 Feb 1988  
 GI



AB The title compds. [I; R = C1-5 alkyl, C3-4 alkenyl, C3-4 alkynyl, C1-3 alkoxy (C1-2)alkyl] were prepared as herbicides. I (R = H) was added to a suspension of NaH in DMF at 0° and the mixture was stirred 30 min. BrCH<sub>2</sub>C.tplbond.CH was

Serial No.:11/880,002

added and the mixture was heated at 50-60° for 2-3 h to give I (R = CH<sub>2</sub>C.tplbond.CH) (II). At 40 g/are preemergent I gave complete control of velvetleaf. A wettable powder was prepared containing 50 parts II, 3 parts Ca ligninsulfonate, 2 parts Na laurylsulfate, and 45 parts hydrated silica by weight

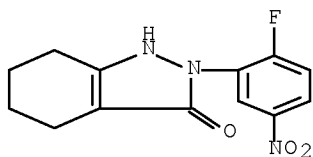
IT 112269-53-1F

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and chlorination of, by trichloromethyl chloroformate)

RN 112269-53-1 HCAPLUS

CN 3H-Indazol-3-one, 2-(2-fluoro-5-nitrophenyl)-1,2,4,5,6,7-hexahydro- (CA INDEX NAME)



L5 ANSWER 65 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:576060 HCAPLUS Full-text

DOCUMENT NUMBER: 107:176060

ORIGINAL REFERENCE NO.: 107:28271a,28274a

TITLE: Preparation of 1-(3-aminophenyl)pyrazoles as herbicides and herbicide intermediates

INVENTOR(S): Kawada, Shuji; Kobayashi, Shinichi; Yanagi, Mikio

PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

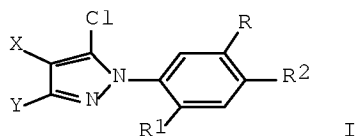
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 62123173	A	19870604	JP 1985-262576	19851125 <--
PRIORITY APPLN. INFO.:			JP 1985-262576	19851125 <--
OTHER SOURCE(S):	CASREACT	107:176060		
ED Entered STN:	14 Nov	1987		
GI				



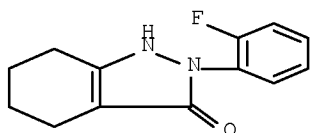
Serial No.:11/880,002

AB The title compds. [I; R = NH<sub>2</sub>; R<sub>1</sub>, R<sub>2</sub>, X, Y = H, halo, alkyl; XY = (CH<sub>2</sub>)<sub>n</sub>; n = 3, 4], useful as herbicides and herbicide intermediates (no data), were prepd by nitration of I (R = H) and reduction of the resulting I (R = NO<sub>2</sub>). HNO<sub>3</sub> and concentrated H<sub>2</sub>SO<sub>4</sub> were added dropwise at -5° to a solution of I (R = H, R<sub>1</sub> = F, R<sub>2</sub> = Cl, X = Br, Y = Me) and the mixture stirred 4 h at -5° to give 88% I (R = NO<sub>2</sub>, R<sub>1</sub> = F, R<sub>2</sub> = Cl, X = Br, Y = Me) which was reduced by Fe/HCl to give 86% I (R = NH<sub>2</sub>, R<sub>1</sub> = F, R<sub>2</sub> = Cl, X = Br, Y = Me).

IT 110706-34-8F  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and chlorination of)

RN 110706-34-8 HCAPLUS

CN 3H-Indazol-3-one, 2-(2-fluorophenyl)-1,2,4,5,6,7-hexahydro- (CA INDEX NAME)



L5 ANSWER 66 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1987:98110 HCAPLUS Full-text

DOCUMENT NUMBER: 106:98110

ORIGINAL REFERENCE NO.: 106:15985a,15988a

TITLE: Preparation of 4,5,6,7-tetrahydro-2H-indazole derivatives and herbicides containing them

INVENTOR(S): Hayase, Yoshio; Ohtsuka, Toshikazu; Ide, Kinya; Takahashi, Toshio

PATENT ASSIGNEE(S): Shionogi and Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 24 pp.  
 CODEN: EPXXDW

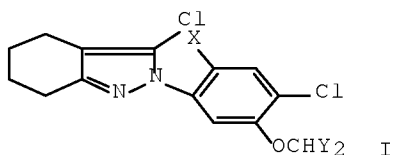
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 197495	A1	19861015	EP 1986-104455	19860402 <--
EP 197495	B1	19900711		
R: DE, FR, IT				
US 4695312	A	19870922	US 1986-846051	19860331 <--
JP 62030761	A	19870209	JP 1986-77452	19860402 <--
JP 05075747	B	19931021		
GB 2173501	A	19861015	GB 1986-8198	19860403 <--
GB 2173501	B	19880817		
PRIORITY APPLN. INFO.:			JP 1985-71428	A 19850403 <--
OTHER SOURCE(S): CASREACT 106:98110; MARPAT 106:98110				
ED Entered STN: 05 Apr 1987				
GI				



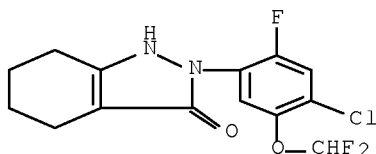
AB The title compds. I (X, Y = halo) are prepared as herbicides. Thus, 3-chloro-2-(2,4-dichloro-5-hydroxyphenyl)-4,5,6,7-tetrahydro-2H-indazole was reacted with ClCHF<sub>2</sub>, in NaOH-containing dioxane, at 50-60°, to give I (X = Cl, Y = F) (II). Pre-emergence 10 g II/are totally controlled large crabgrass and slender amaranth, with no injury to wheat, soybean, and cotton.

IT 106969-05-5P 106969-08-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and chlorination of)

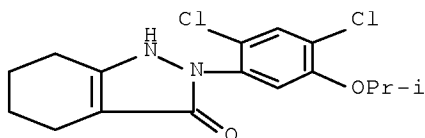
RN 106969-05-5 HCAPLUS

CN 3H-Indazol-3-one, 2-[4-chloro-5-(difluoromethoxy)-2-fluorophenyl]-1,2,4,5,6,7-hexahydro- (CA INDEX NAME)



RN 106969-08-8 HCAPLUS

CN 3H-Indazol-3-one, 2-[2,4-dichloro-5-(1-methylethoxy)phenyl]-1,2,4,5,6,7-hexahydro- (CA INDEX NAME)



L5 ANSWER 67 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:626551 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 105:226551

ORIGINAL REFERENCE NO.: 105:36587a,36590a

TITLE: (Sulfonamidophenyl)pyrazoles and their use as herbicides

INVENTOR(S): Yanagi, Mikio; Kawada, Shuji; Futatsuya, Fumio; Kobayashi, Kenji

PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan

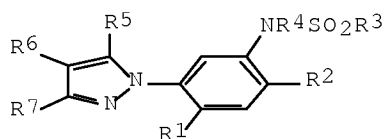
SOURCE: Eur. Pat. Appl., 39 pp.

CODEN: EPXXDW

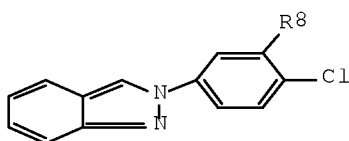


DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 191303	A1	19860820	EP 1986-100385	19860114 <--
R: CH, DE, FR, GB, IT, LI				
JP 61165374	A	19860726	JP 1985-3957	19850116 <--
JP 62033155	A	19870213	JP 1985-171793	19850806 <--
US 4666507	A	19870519	US 1985-814395	19851230 <--
BR 8600123	A	19860923	BR 1986-123	19860115 <--
NL 8601766	A	19870302	NL 1986-1766	19860707 <--
BE 905091	A1	19870112	BE 1986-216907	19860711 <--
ES 2000669	A6	19880316	ES 1986-302	19860715 <--
PRIORITY APPLN. INFO.:			JP 1985-3957	A 19850116 <--
			JP 1985-171793	A 19850806 <--
OTHER SOURCE(S):			CASREACT 105:226551; MARPAT 105:226551	
ED Entered STN: 26 Dec 1986				
GI				



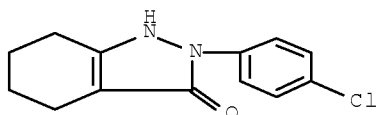
I



II

AB The title compds. [I; R1 = H, halo, Me; R2 = H, halo, alkyl; R3 = PhCH2, (substituted) lower alkyl, Ph; R4 = H, alkenyl, alkynyl, (substituted) alkyl, (halo-substituted) MeSO2, Ph; R5 = halo; R6, R7 = Me, Et; R6R7 = (CH2)3, (CH2)4] (.apprx.64 compds.) were prepared as herbicides. Thus, benzopyrazole II (R8 = NO2) was reduced to the amine which was treated with (F3CSO2)2O to give 50% II (R8 = NHSO2CF3) (III). At 0.8 g/are, III gave complete control of barnyardgrass, broadleaf weeds, and bulrush, without damage to preemegent rice in flooded fields. The title compds. also controlled weeds in soybeans, cotton, corn, wheat, and sunflowers without damage to crops.

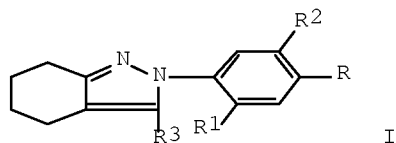
IT 64486-21-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of)  
 RN 64486-21-1 HCAPLUS  
 CN 3H-Indazol-3-one, 2-(4-chlorophenyl)-1,2,4,5,6,7-hexahydro- (CA INDEX NAME)



L5 ANSWER 68 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:148872 HCAPLUS Full-text  
 DOCUMENT NUMBER: 104:148872  
 ORIGINAL REFERENCE NO.: 104:23569a,23572a  
 TITLE: Tetrahydroindazoles  
 INVENTOR(S): Naohara, Tetsuo; Natsume, Fumitsugu; Yotsuya, Toyohiko; Suzuki, Seiichi; Kabe, Hiroshi  
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60233061	A	19851119	JP 1984-89665	19840504 <--
PRIORITY APPLN. INFO.:			JP 1984-89665	19840504 <--
OTHER SOURCE(S):		CASREACT 104:148872		
ED Entered STN: 03 May 1986				
GI				



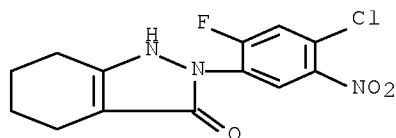
AB The title compds. [I, R = Cl, Br; R1 = F, Cl, MeO; R2 = NO<sub>2</sub>, substituted amino or sulfonyl, sulfinyl, or sulfenyl; R3 = halo, MeO], useful as herbicides (effective at 5,10,20 g/are), were prepared Thus, refluxing a mixture of 15.0 g 2-(4-chloro-2-fluoro-5-nitrophenyl)-1,2,4,5,6,7-hexahydro- 3H-indazol-3-one and 11.6 g POCl<sub>3</sub> for 5 h gave 5.80 g I [R = R3 = Cl, R1 = F, R2 = NO<sub>2</sub>].

IT 101303-75-7

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (chlorination of)

RN 101303-75-7 HCAPLUS

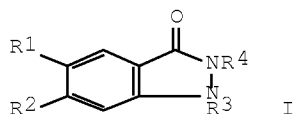
CN 3H-Indazol-3-one, 2-(4-chloro-2-fluoro-5-nitrophenyl)-1,2,4,5,6,7-hexahydro- (CA INDEX NAME)



L5 ANSWER 69 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

Serial No.:11/880,002

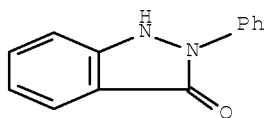
ACCESSION NUMBER: 1984:203128 HCAPLUS Full-text  
 DOCUMENT NUMBER: 100:203128  
 ORIGINAL REFERENCE NO.: 100:30709a,30712a  
 TITLE: Hypolipidemic activity of phthalimide derivatives. 7.  
 Structure-activity studies of indazolone analogs  
 AUTHOR(S): Wyrick, Steven D.; Voorstad, P. Josee; Cocolas,  
 George; Hall, Iris H.  
 CORPORATE SOURCE: Sch. Pharm., Univ. North Carolina, Chapel Hill, NC,  
 27514, USA  
 SOURCE: Journal of Medicinal Chemistry (1984),  
 27(6), 768-72  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ED Entered STN: 23 Jun 1984  
 GI



AB The indazolone analogs I (R1 = H, Cl, or Me; R2 = H or Cl; R3 = H or CO2Et; R4 = H, Cl-5 alkyl, CO2Et, CH2CH2OH, CH2(CH2)2OH, CH2CH2C(O)Me, Ph, (un)substituted benzyl) prepared from the corresponding anthranilic acid by diazotization, alkylation, and decarbethoxylation, were evaluated for antihyperlipidemic activity in CF1 male mice at 20 mg/kg/day, i.p. N2-Butylindazolone (I; R1 = R2 = R3 = H, R4 = Bu) [89438-55-1] was the most active compound. Structure activity relations are discussed.

IT 17049-65-9P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (preparation and hypolipemic activity of)

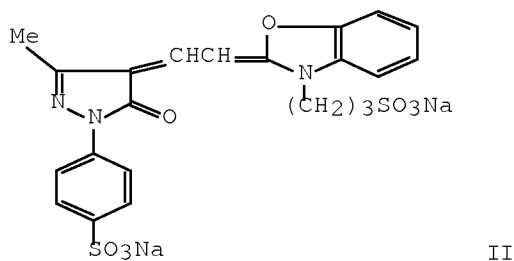
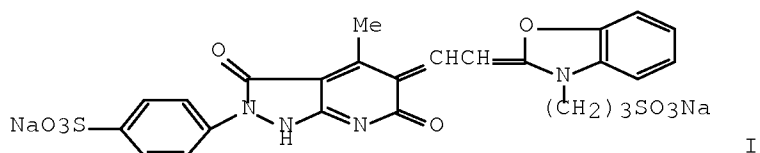
RN 17049-65-9 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 70 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1983:596653 HCAPLUS Full-text  
 DOCUMENT NUMBER: 99:196653  
 ORIGINAL REFERENCE NO.: 99:30279a,30282a  
 TITLE: Methine dyes  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokyo Koho, 11 pp.

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58065756	A	19830419	JP 1981-162971	19811012 <--
JP 59005622	B	19840206		
PRIORITY APPLN. INFO.:			JP 1981-162971	19811012 <--
ED Entered STN: 12 May 1984				
GI				



AB Pyrazolopyridine ring-containing methines absorbing at longer wavelength than conventional pyrazolinone analogs were prepared. These methines form stable solns. and are irreversibly bleached in photog. processes. Thus, 4-methyl-2-(4-sulfophenyl)pyrazolo[3,4-b]pyridine-3,6-dione triethylamine salt [65563-44-2] was treated with anhydro-2-(2-anilinovinyl)-3- (3-sulfopropyl)benzoxazolium hydroxide [55036-57-2] in  $\gamma$ -butyrolactone, Ac<sub>2</sub>O, and then Et<sub>3</sub>N, refluxed for 15 min, filtered, and treated with methanolic NaI to give red-orange I [65563-31-7],  $\lambda_{\max}$  (H<sub>2</sub>O) 484 nm, compared with 446 nm for II.

IT 65563-44-2

RL: USES (Uses)  
 (in methine dye manufacture)

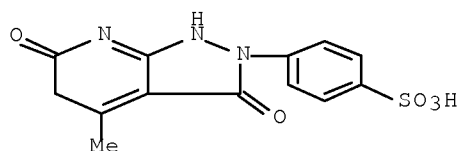
RN 65563-44-2 HCAPLUS

CN Benzenesulfonic acid, 4-(1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl)-, compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 65563-43-1

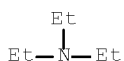
CMF C13 H11 N3 O5 S



CM 2

CRN 121-44-8

CMF C6 H15 N



L5 ANSWER 71 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1983:559944 HCAPLUS Full-text

DOCUMENT NUMBER: 99:159944

ORIGINAL REFERENCE NO.: 99:24523a,24526a

TITLE: Methine dyes

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

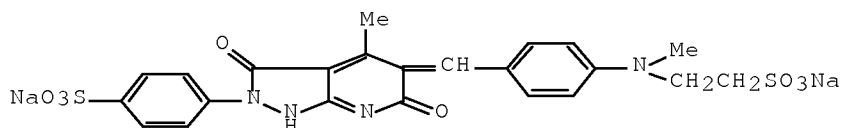
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58065757	A	19830419	JP 1981-162972	19811012 <--
PRIORITY APPLN. INFO.:			JP 1981-162972	19811012 <--
ED Entered STN: 12 May 1984				
GI				



I

AB Pyrazolopyridine methine dyes showing absorption at long wavelength region were prepared. These dyes were irreversibly bleached by sulfite and used in photog. materials without inducing fogging or sensitivity lowering. Thus, 4-methyl-2-(4-sulfophenyl)pyrazolo[3,4-b]pyridine-3,6-dione triethylamine salt [65563-44-2] was treated with 4-[N-methyl-N-(2-sulfoethyl)amino]benzaldehyde

Serial No.:11/880,002

Na salt [56405-41-5] in the presence of Et<sub>3</sub>N in  $\gamma$ -butyrolactone for 5 min, treated with AcOH at 150° for 15 min, and stirred with NaI for 10 min to give dark red I [65563-39-5],  $\lambda_{\text{max}}$ (H<sub>2</sub>O) 600 nm.

IT 65563-44-2

RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with [methyl(sulfoethyl)amino]benzaldehyde)

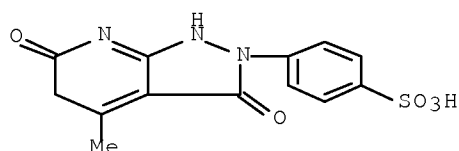
RN 65563-44-2 HCAPLUS

CN Benzenesulfonic acid, 4-(1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl)-, compd. with N,N-diethylethanamine (1:1)  
(9CI) (CA INDEX NAME)

CM 1

CRN 65563-43-1

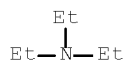
CMF C13 H11 N3 O5 S



CM 2

CRN 121-44-8

CMF C6 H15 N



L5 ANSWER 72 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1983:558316 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 99:158316

ORIGINAL REFERENCE NO.: 99:24273a,24276a

TITLE: Comparative study of the reactivity of ethyl acetoacetate and ethyl 3-aminocrotonate with pyrazolone derivatives

AUTHOR(S): Maquestiau, A.; Van Haverbeke, Y.; Vanden Eynde, J. J.

CORPORATE SOURCE: Lab. Chim. Org., Univ. Etat, Mons, 7000, Belg.

SOURCE: Bulletin des Societes Chimiques Belges (1983), 92(5), 451-8

CODEN: BSCBAG; ISSN: 0037-9646

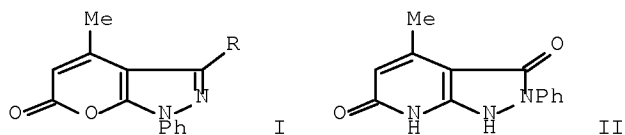
DOCUMENT TYPE: Journal

LANGUAGE: French

OTHER SOURCE(S): CASREACT 99:158316

ED Entered STN: 12 May 1984

GI



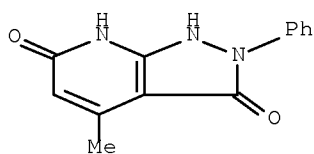
AB     Pyrazolinone and pyrazolidinedione compds. reacted with  $\text{MeCOCH}_2\text{CO}_2\text{Et}$  and  $\text{MeC}(\text{NH}_2):\text{CHCO}_2\text{Et}$  to yield pyranopyrazoles I ( $\text{R} = \text{Me}, \text{OH}$ ). 1-Phenyl-3-methyl-2-pyrazolin-5-one was treated with  $\text{MeCOCH}_2\text{CO}_2\text{Et}$  (or its enamine) to give I ( $\text{R} = \text{Me}$ ). Pyrazolopyridine derivative II was obtained from 1-phenyl-3-amino-2-pyrazolin-5-one and  $\text{MeCOCH}_2\text{CO}_2\text{Et}$  (or its enamine).

IT 71290-80-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 71290-80-7 HCAPLUS

CN	1H-Pyrazolo[3,4-b]pyridine-3,6(2H,7H)-dione, 4-methyl-2-phenyl-	(CA INDEX NAME)
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L5 ANSWER 73 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1983:424020 HCAPLUS Full-text

DOCUMENT NUMBER: 99:24020

ORIGINAL REFERENCE NO.: 99:3887a, 3890a

TITLE: 3,6-Dioxo-1,2-dihydro-7H-pyrazolo[3,4-b]pyridine azo  
dyes

INVENTOR(S) : Herd, Karl Josef

PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 72 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3138774	A1	19830414	DE 1981-3138774	19810930 <--
EP 75808	A2	19830406	EP 1982-108615	19820918 <--
EP 75808	A3	19830727		

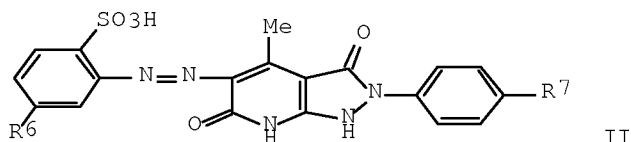
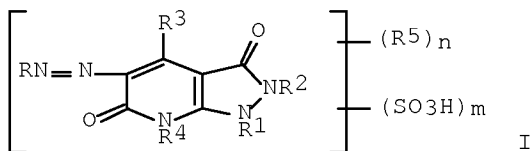
R: CH, DE, FR, GB, IT, LI

JP 58069254 A 19830425 JP 1982-166783 19820927 &lt;--

PRIORITY APPLN. INFO.: DE 1981-3138774 A 19810930 <--

OTHER SOURCE(S): MARPAT 99:24020

ED Entered STN: 12 May 1984  
GI



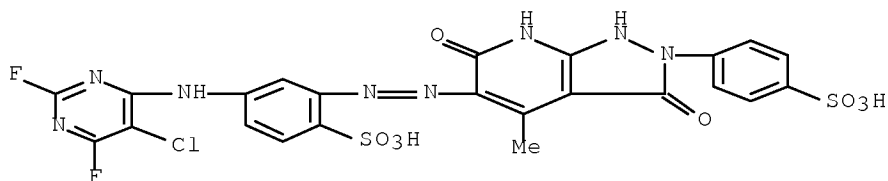
AB Dyes of general structure I are prepared, where R represents the residue of a benzene, naphthalene, or heterocyclic diazo component; R1 and R2 = H, acyl, optionally substituted alkyl, aryl, heteroaryl, or aralkyl, or O-, NH-, SO-, or SO2-interrupted alkenyl; R3 = H, optionally substituted alkyl or aryl, carboxylate ester, carbamoyl, amino, or optionally substituted heteroaryl; R4 = H, optionally substituted alkyl or aryl, alkenyl, OH, or acylamino; R5 = fiber-reactive group; n = 0-2; and m = 0-6. I in which m ≠ 0 are reactive dyes for cellulose and polyamide fiber, and those with n = 0 which are water soluble are dyes for wool, nylon, leather, and cellulosic fibers. Typical dyes are brown (on nylon and wool) II (R6 = R7 = H) [86104-89-4], prepared by coupling diazotized 2-H2NC6H4SO3H [88-21-1] with 4-methyl-2-phenyl-1,2-dihydro-7H-pyrazolo[3,4-b]pyridine-3,6-dione [71290-80-7], and yellowish brown (on cellulose) II (R6 = 5-chloro-2,6-difluoropyrimidin-4-ylamino, R7 = SO3H) [86104-90-7], prepared by coupling diazotized 2-amino-4-[(5-chloro-2,6-difluoropyrimidin-4-yl)amino]benzenesulfonic acid [26592-28-9] with 4-methyl-2-(4-sulfophenyl)-1,2-dihydro-7H-pyrazolo[3,4-b]pyridine-3,6-dione [86104-85-0].

IT 86104-90-7

RL: TEM (Technical or engineered material use); USES (Uses)  
(dye, for cellulosic textiles, manufacture of)

RN 86104-90-7 HCAPLUS

CN Benzenesulfonic acid, 4-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]-2-[[2,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2-(4-sulfophenyl)-1H-pyrazolo[3,4-b]pyridin-5-yl]azo]- (9CI) (CA INDEX NAME)

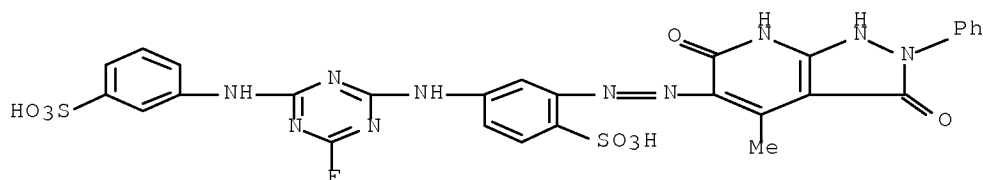


IT 86104-77-0 86104-78-1

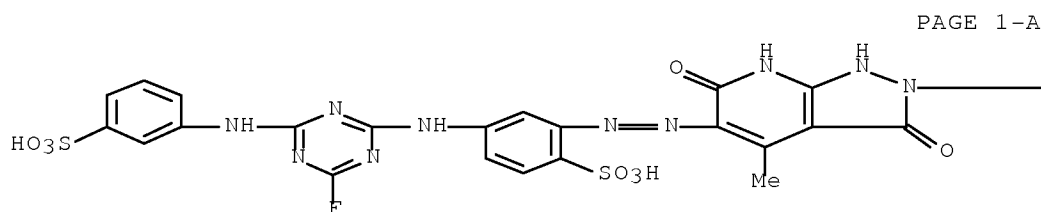
RL: TEM (Technical or engineered material use); USES (Uses)  
(dye, for cotton)



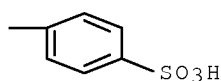
RN 86104-77-0 HCAPLUS  
 CN Benzenesulfonic acid, 4-[[[4-fluoro-6-[(3-sulfophenyl)amino]-1,3,5-triazin-2-yl]amino]-2-[(2,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2-phenyl-1H-pyrazolo[3,4-b]pyridin-5-yl)azo]- (9CI) (CA INDEX NAME)



RN 86104-78-1 HCAPLUS  
 CN Benzenesulfonic acid, 5-[[[4-fluoro-6-[(3-sulfophenyl)amino]-1,3,5-triazin-2-yl]amino]-2-[[2,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2-(4-sulfophenyl)-1H-pyrazolo[3,4-b]pyridin-5-yl]azo]- (9CI) (CA INDEX NAME)

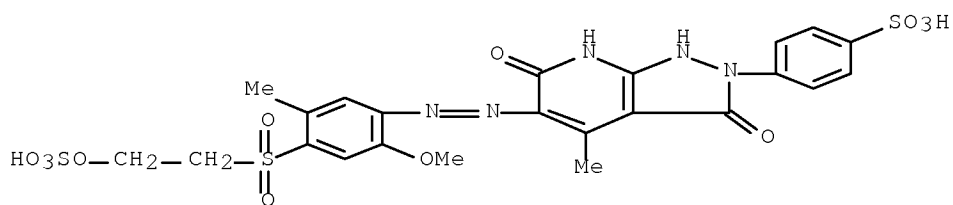


PAGE 1-A



PAGE 1-B

IT 86104-79-2  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (dye, for cotton, manufacture of)  
 RN 86104-79-2 HCAPLUS  
 CN Benzenesulfonic acid, 4-[1,3,6,7-tetrahydro-5-[[[2-methoxy-5-methyl-4-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]azo]-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]- (9CI) (CA INDEX NAME)



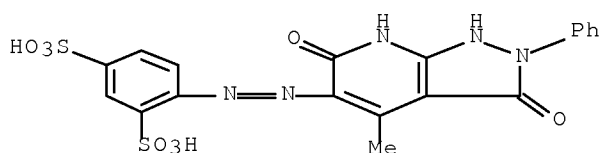
IT 86104-50-9

RL: USES (Uses)

(dye, for leather, manufacture of)

RN 86104-50-9 HCAPLUS

CN 1,3-Benzenedisulfonic acid, 4-[(2,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2-phenyl-1H-pyrazolo[3,4-b]pyridin-5-yl)azo]- (9CI) (CA INDEX NAME)



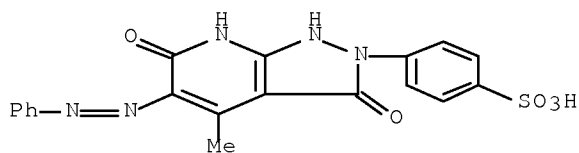
IT 86104-63-4 86104-89-4

RL: USES (Uses)

(dye, for nylon and wool, manufacture of)

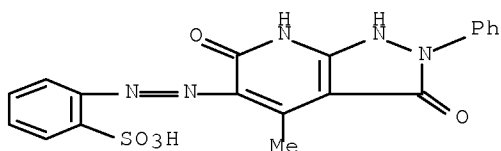
RN 86104-63-4 HCAPLUS

CN Benzenesulfonic acid, 4-[1,3,6,7-tetrahydro-4-methyl-3,6-dioxo-5-(phenylazo)-2H-pyrazolo[3,4-b]pyridin-2-yl]- (9CI) (CA INDEX NAME)



RN 86104-89-4 HCAPLUS

CN Benzenesulfonic acid, 2-[(2,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2-phenyl-1H-pyrazolo[3,4-b]pyridin-5-yl)azo]- (9CI) (CA INDEX NAME)

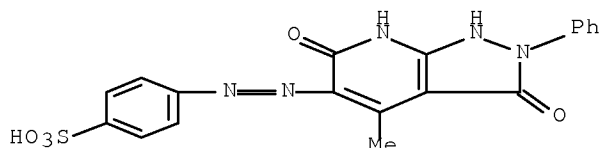


IT 86104-46-3P 86104-47-4P 86104-48-5P  
 86104-49-6P 86104-51-0P 86104-59-8P  
 86104-62-3P 86104-64-5P 86104-65-6P  
 86104-69-0P 86104-71-4P 86104-74-7P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (dye, manufacture of)

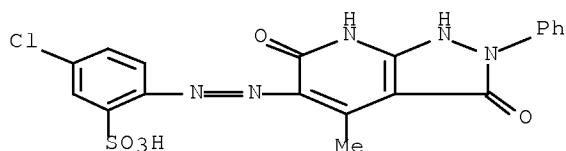
RN 86104-46-3 HCAPLUS

CN Benzenesulfonic acid, 4-[(2,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2-phenyl-1H-pyrazolo[3,4-b]pyridin-5-yl)azo]- (9CI) (CA INDEX NAME)



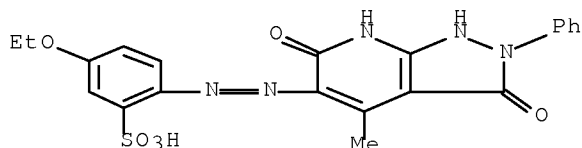
RN 86104-47-4 HCAPLUS

CN Benzenesulfonic acid, 5-chloro-2-[(2,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2-phenyl-1H-pyrazolo[3,4-b]pyridin-5-yl)azo]- (9CI) (CA INDEX NAME)



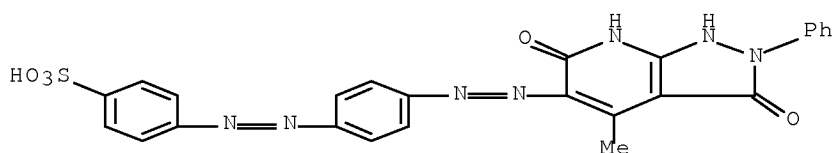
RN 86104-48-5 HCAPLUS

CN Benzenesulfonic acid, 5-ethoxy-2-[(2,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2-phenyl-1H-pyrazolo[3,4-b]pyridin-5-yl)azo]- (9CI) (CA INDEX NAME)



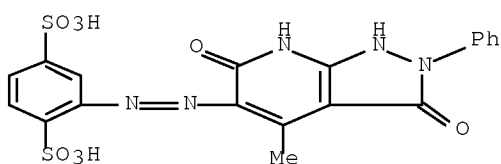
RN 86104-49-6 HCAPLUS

CN Benzenesulfonic acid, 4-[[4-[(2,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2-phenyl-1H-pyrazolo[3,4-b]pyridin-5-yl)azo]phenyl]azo]- (9CI) (CA INDEX NAME)



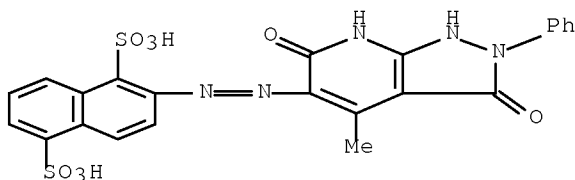
RN 86104-51-0 HCAPLUS

CN 1,4-Benzenedisulfonic acid, 2-[(2,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2-phenyl-1H-pyrazolo[3,4-b]pyridin-5-yl)azo]- (9CI) (CA INDEX NAME)



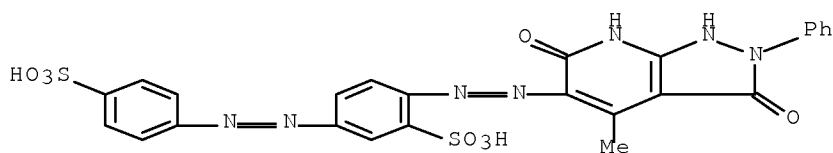
RN 86104-59-8 HCAPLUS

CN 1,5-Naphthalenedisulfonic acid, 2-[(2,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2-phenyl-1H-pyrazolo[3,4-b]pyridin-5-yl)azo]- (9CI) (CA INDEX NAME)



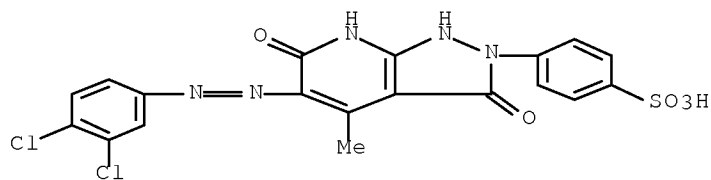
RN 86104-62-3 HCAPLUS

CN Benzenesulfonic acid, 5-[(4-sulfophenyl)azo]-2-[(2,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2-phenyl-1H-pyrazolo[3,4-b]pyridin-5-yl)azo]- (9CI) (CA INDEX NAME)



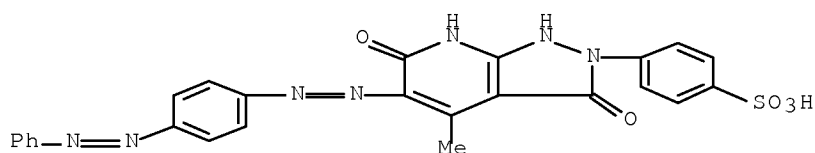
RN 86104-64-5 HCAPLUS

CN Benzenesulfonic acid, 4-[5-[(3,4-dichlorophenyl)azo]-1,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl]- (9CI) (CA INDEX NAME)



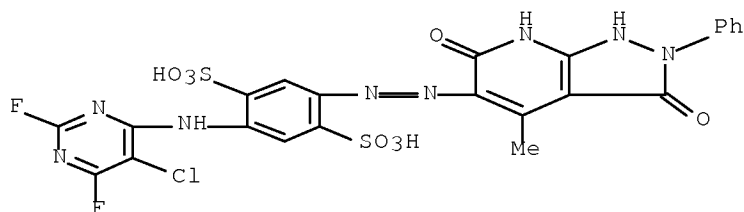
RN 86104-65-6 HCAPLUS

CN Benzenesulfonic acid, 4-[1,3,6,7-tetrahydro-4-methyl-3,6-dioxo-5-[[4-(phenylazo)phenyl]azo]-2H-pyrazolo[3,4-b]pyridin-2-yl]- (9CI) (CA INDEX NAME)



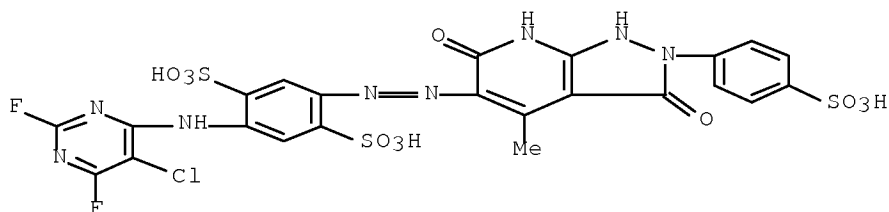
RN 86104-69-0 HCAPLUS

CN 1,4-Benzenedisulfonic acid, 2-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]-5-[(2,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2-phenyl-1H-pyrazolo[3,4-b]pyridin-5-yl)azo]- (9CI) (CA INDEX NAME)

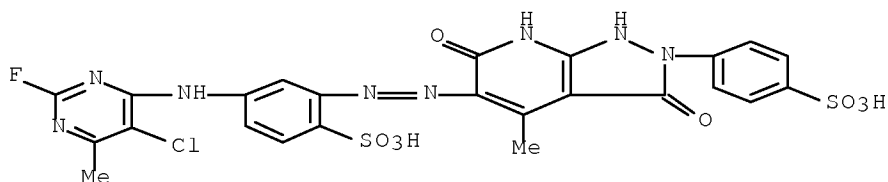


RN 86104-71-4 HCAPLUS

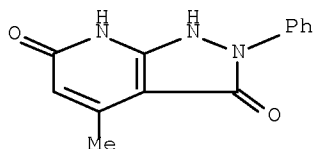
CN 1,4-Benzenedisulfonic acid, 2-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]-5-[[2,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2-(4-sulfohenyl)-1H-pyrazolo[3,4-b]pyridin-5-yl]azo]- (9CI) (CA INDEX NAME)



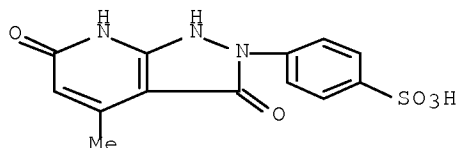
RN 86104-74-7 HCAPLUS  
 CN Benzenesulfonic acid, 4-[(5-chloro-2-fluoro-6-methyl-4-pyrimidinyl)amino]-  
 2-[2,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2-(4-sulfophenyl)-1H-  
 pyrazolo[3,4-b]pyridin-5-yl]azo]- (9CI) (CA INDEX NAME)



IT 71290-80-7P 86104-85-0P  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and coupling of, with diazotized aniline derivs.)  
 RN 71290-80-7 HCAPLUS  
 CN 1H-Pyrazolo[3,4-b]pyridine-3,6(2H,7H)-dione, 4-methyl-2-phenyl- (CA INDEX  
 NAME)

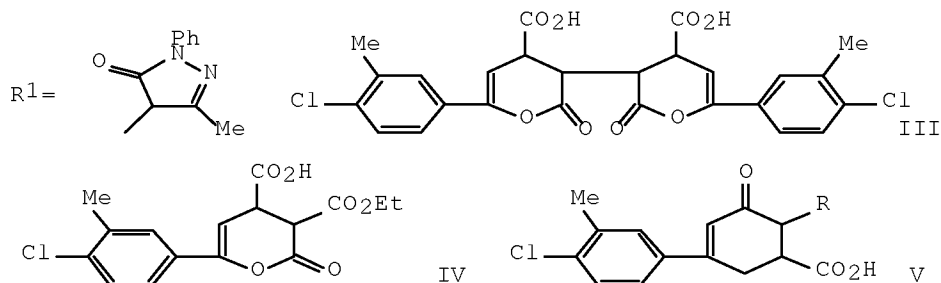


RN 86104-85-0 HCAPLUS  
 CN Benzenesulfonic acid, 4-(1,3,6,7-tetrahydro-4-methyl-3,6-dioxo-2H-  
 pyrazolo[3,4-b]pyridin-2-yl)- (CA INDEX NAME)



L5 ANSWER 74 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1983:143069 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 98:143069  
 ORIGINAL REFERENCE NO.: 98:21785a,21788a  
 TITLE: Behavior of  $\beta$ -(4-chloro-3-methylbenzoyl)acrylic  
 acid towards carbon nucleophiles under Michael  
 reaction conditions  
 AUTHOR(S): El-Hashash, M. A.; Mohamed, M. M.; Islam, I. E.;

Abo-Baker, O. A.  
 CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Cairo, Egypt  
 SOURCE: Indian Journal of Chemistry, Section B: Organic  
 Chemistry Including Medicinal Chemistry (1982  
 ), 21B(8), 735-9  
 CODEN: IJSBDB; ISSN: 0376-4699  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 98:143069  
 ED Entered STN: 12 May 1984  
 GI



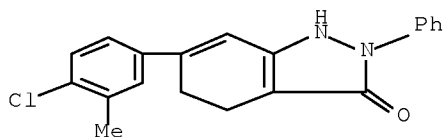
AB Treating 4,3-Cl(Me)C<sub>6</sub>H<sub>3</sub>COCH:CHCO<sub>2</sub>H (I) with active methylene compds., e.g., cyclohexanone, cyclopentanone, camphor, R<sup>1</sup>H and EtO<sub>2</sub>CCH<sub>2</sub>CN in alc. NaOH at 40° gave Michael adducts 4,3-Cl(Me)C<sub>6</sub>H<sub>3</sub>COCH<sub>2</sub>CHRCO<sub>2</sub>H (II; R = 2-oxocyclohexyl, 2-oxocyclopentyl, 3-camphoryl, R<sup>1</sup>); using EtO<sub>2</sub>CCH<sub>2</sub>COMe and EtO<sub>2</sub>CCH<sub>2</sub>Ph in boiling alc. NaOH gave II (R = CH<sub>2</sub>COMe, CH<sub>2</sub>Ph). I on treatment with (EtO<sub>2</sub>CCH<sub>2</sub>)<sub>2</sub> in the presence of NaOMe at room temperature gave III. Fusing III with (EtO<sub>2</sub>C)<sub>2</sub>CH<sub>2</sub>, MeCOEt, or CH<sub>2</sub>(COMe)<sub>2</sub>, resp., in NaOMe gave IV, V (R = Me, CO<sub>2</sub>Et) and an oily CH<sub>2</sub>(COMe)<sub>2</sub> product whose hydrolysis with 10% KOH gave V (R = H).

IT 84797-23-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and Diels-Alder reaction of)

RN 84797-23-9 HCAPLUS

CN 3H-Indazol-3-one, 6-(4-chloro-3-methylphenyl)-1,2,4,5-tetrahydro-2-phenyl-  
 (CA INDEX NAME)



L5 ANSWER 75 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

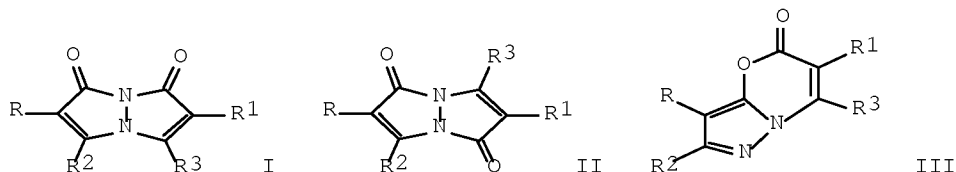
ACCESSION NUMBER: 1982:561974 HCAPLUS Full-text

DOCUMENT NUMBER: 97:161974

ORIGINAL REFERENCE NO.: 97:27005a,27008a

TITLE: Bimanes. 15. Kinetics and mechanism of the hydroxide

ion reaction with 1,5-diazabicyclo[3.3.0]octadienediones (9,10-dioxabimanes)  
 AUTHOR(S): Kanety, Hannah; Kosower, Edward M.  
 CORPORATE SOURCE: Dep. Chem., Tel-Aviv Univ., Tel-Aviv, 69978, Israel  
 SOURCE: Journal of Organic Chemistry (1982), 47(22), 4222-6  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ED Entered STN: 12 May 1984  
 GI



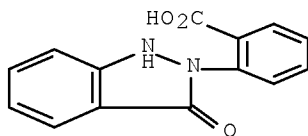
AB The rate consts. for the ring cleavage of I ( $R = R_1 = \text{Me}, \text{H}$ ;  $R_2 = R_3 = \text{Cl}, \text{H}$ ) or II ( $R = R_1 = \text{Me}, \text{H}$ ;  $R_2 = R_3 = \text{Cl}, \text{H}$ ) have LFER with  $[\sigma(R) + 0.5\sigma(R_1)]$  or  $[\sigma(R_2) = 0.5\sigma(R_3)]$ ;  $\rho$  is 3.0 or .apprx.4, resp. The  $\rho$  for the hydrolysis of III (formed from the photoisomerization of II) is 3.7. The hydrolysis of II or III leads to the same product, the corresponding 1-pyrazolinonylacrylic acids (IV); the hydrolysis of I gives the corresponding 2-pyrazolinonylacrylic acids (V). IV and electrophilic agents gives the corresponding II (predominant) and III; V under similar conditions gives I.  $^1\text{H}$  NMR indicates that hydrolysis of I ( $R = R_1 = R_2 = R_3 = \text{H}$ ) gives the corresponding (E)-V.

IT 18428-91-6

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (ring closure of, by electrophilic reagents)

RN 18428-91-6 HCAPLUS

CN Benzoic acid, 2-(1,3-dihydro-3-oxo-2H-indazol-2-yl)- (CA INDEX NAME)



L5 ANSWER 76 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:68404 HCAPLUS Full-text

DOCUMENT NUMBER: 96:68404

ORIGINAL REFERENCE NO.: 96:11233a,11236a

TITLE: Bromination of cyclohexanone-2-carboxamide

AUTHOR(S): Bischoff, Christian; Schroeder, Edith

CORPORATE SOURCE: Zentralinst. Org. Chem., DAW, Berlin-Adlershof,  
 DDR-1199, Ger. Dem. Rep.

SOURCE: Journal fuer Praktische Chemie (Leipzig) (1981)



), 323(4), 616-20

CODEN: JPCEAO; ISSN: 0021-8383

DOCUMENT TYPE:

Journal

LANGUAGE:

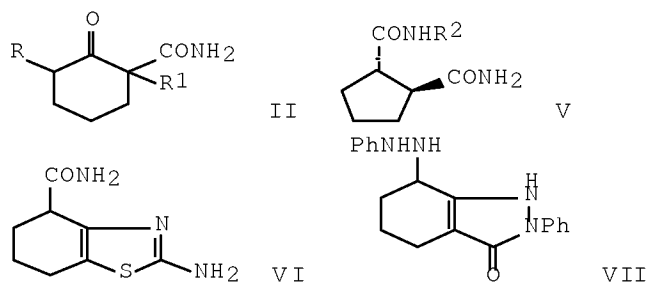
German

OTHER SOURCE(S):

CASREACT 96:68404

ED Entered STN: 12 May 1984

GI



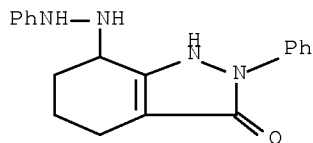
AB Brominating the title compound (I) in the presence of Na<sub>2</sub>CO<sub>3</sub> gave II (R = H, R<sub>1</sub> = Br) (III), but II (R = Br, R<sub>1</sub> = H) (IV) without Na<sub>2</sub>CO<sub>3</sub>. Favorskii rearrangement of III with R<sub>2</sub>NH<sub>2</sub> [R<sub>2</sub> = H, Pr, Bu, Me(CH<sub>2</sub>)<sub>5</sub>, 4-ClC<sub>6</sub>H<sub>4</sub>] or piperidine gave the corresponding V. Cyclocondensation of IV and H<sub>2</sub>NC(S)NH<sub>2</sub> gave VI. Treating III with pyridine gave a salt which was treated with PhNHNH<sub>2</sub> to give VII.

IT 80193-15-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 80193-15-3 HCAPLUS

CN 3H-Indazol-3-one, 1,2,4,5,6,7-hexahydro-2-phenyl-7-(2-phenylhydrazino)-  
(9CI) (CA INDEX NAME)



L5 ANSWER 77 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1980:639323 HCAPLUS Full-text

DOCUMENT NUMBER: 93:239323

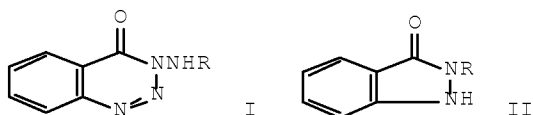
ORIGINAL REFERENCE NO.: 93:38339a,38342a

TITLE: 1,2,3-Benzotriazin-4-ones and related systems. Part  
7. Thermal decomposition of 3-anilino-,  
3-methylamino-, and 3-acetylamino-1,2,3-benzotriazin-4-  
one

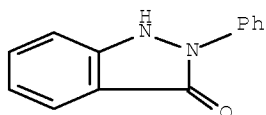
AUTHOR(S): Paterson, Thomas McC.; Smalley, Robert K.

CORPORATE SOURCE: Dep. Chem. Appl. Chem., Univ. Salford, Salford, M5

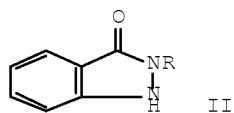
4WT, UK  
 SOURCE: Journal of Chemical Research, Synopses (1980), (7), 246-7  
 CODEN: JRPSDC; ISSN: 0308-2342  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 93:239323  
 ED Entered STN: 12 May 1984  
 GI



AB The thermal decomposition of the title compds. (I; R = Me, Ph, Ac) (1-MeClOH7, reflux) gave the indazolones II (R as before) in yields of 80, 88, and 62%, resp.). The structures of the products were elucidated by standard phys. methods. A new method is described for preparation of I (R = Ph) from o-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CONHNHPh by sequential acetylation, reduction, diazotization, and deacetylation.  
 IT 17049-65-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 17049-65-9 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 78 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1980:446502 HCAPLUS Full-text  
 DOCUMENT NUMBER: 93:46502  
 ORIGINAL REFERENCE NO.: 93:7687a  
 TITLE: Base-induced intramolecular cyclization of N-(o-azidobenzoyl)arylamines. A new synthesis of 2-aryl-1,2-dihydro-3H-indazolin-3-ones  
 AUTHOR(S): Ardakani, Manouchehr A.; Smalley, Robert K.  
 CORPORATE SOURCE: Dep. Chem. Appl. Chem., Univ. Salford, Salford, M5 4WT, UK  
 SOURCE: Tetrahedron Letters (1979), (49), 4765-8  
 CODEN: TELEAY; ISSN: 0040-4039  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ED Entered STN: 12 May 1984  
 GI



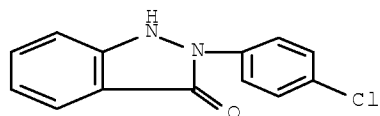
AB 2-N3C6H4CONHR (I; R = Ph, 2-Me-, -ClC6H4, 4-Me-, -MeO-, -ClC6H4, 2,4,6-Me3C6H2, 2-pyridyl) cyclized on strong base (NaH, DMF) treatment to give 45-99% indazolinones II. A mechanistic route from I to II is reported.

IT 17049-63-7P 74152-87-7P 74152-88-8P  
74152-89-9P 74152-90-2P 74152-91-3P  
74152-92-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

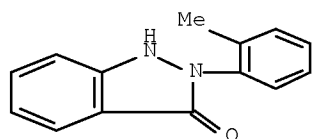
RN 17049-63-7 HCAPLUS

CN 3H-Indazol-3-one, 2-(4-chlorophenyl)-1,2-dihydro- (CA INDEX NAME)



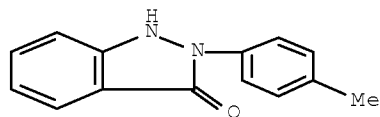
RN 74152-87-7 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-(2-methylphenyl)- (CA INDEX NAME)



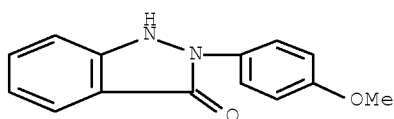
RN 74152-88-8 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-(4-methylphenyl)- (CA INDEX NAME)

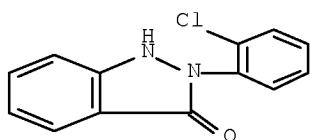


RN 74152-89-9 HCAPLUS

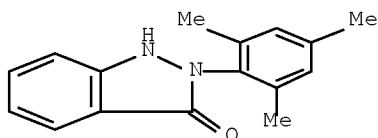
CN 3H-Indazol-3-one, 1,2-dihydro-2-(4-methoxyphenyl)- (CA INDEX NAME)



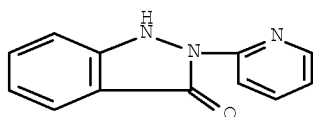
RN 74152-90-2 HCAPLUS  
 CN 3H-Indazol-3-one, 2-(2-chlorophenyl)-1,2-dihydro- (CA INDEX NAME)



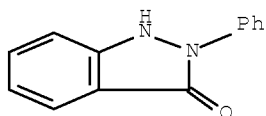
RN 74152-91-3 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



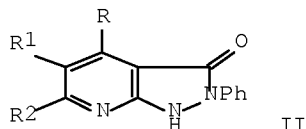
RN 74152-92-4 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-(2-pyridinyl)- (CA INDEX NAME)



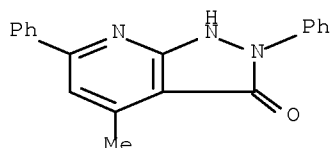
IT 17049-65-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, by intramol. cyclization of azidobenzanilide)  
 RN 17049-65-9 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



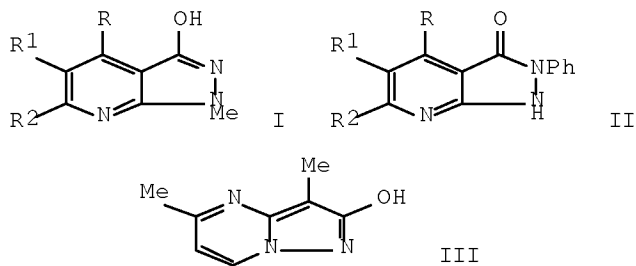
L5 ANSWER 79 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1980:215335 HCAPLUS Full-text  
 DOCUMENT NUMBER: 92:215335  
 ORIGINAL REFERENCE NO.: 92:34883a,34886a  
 TITLE: Synthesis of 2-phenylpyrazolo[3,4-b]pyridine-3(1H)-ones  
 AUTHOR(S): Maquestiau, A.; Van Haverbeke, Y.; Vanden Eynde, J. J.  
 CORPORATE SOURCE: Serv. Chim. Org., Univ. Etat Mons, Mons, 7000, Belg.  
 SOURCE: Bulletin des Societes Chimiques Belges (1980), 89(1), 51-5  
 CODEN: BSCBAG; ISSN: 0037-9646  
 DOCUMENT TYPE: Journal  
 LANGUAGE: French  
 OTHER SOURCE(S): CASREACT 92:215335  
 ED Entered STN: 12 May 1984  
 GI



AB 1-Phenyl-3-amino-2-pyrazolin-5-one (I) underwent a cyclocondensation reaction with unsym.  $\beta$ -diketones to give the resp. pyrazolopyridinones II (isomer mixts.) [R = Me, Ph; R1 = H; R2 = Ph, Me; RR1 = (CH2)3, (CH2)4; R2 = Me; R = Me; R1R2 = (CH2)3, (CH2)4]. I was treated with PhCOCH2COMe in EtOH to give a mixture of II (R = Me, R1 = H, R2 = Ph) (III) and II (R = Ph, R1 = H, R2 = Me); the reaction of I with PhCOCH2COMe in HOAc gave III only.  
 IT 71290-78-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
 RN 71290-78-3 HCAPLUS  
 CN 3H-Pyrazolo[3,4-b]pyridin-3-one, 1,2-dihydro-4-methyl-2,6-diphenyl- (CA INDEX NAME)

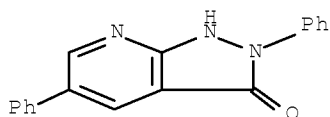


L5 ANSWER 80 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1979:523667 HCAPLUS Full-text  
 DOCUMENT NUMBER: 91:123667  
 ORIGINAL REFERENCE NO.: 91:19959a,19962a  
 TITLE: Synthesis of 1H-pyrazolo[3,4-b]pyridines and of  
 pyrazolo[1,5-a]pyrimidines  
 AUTHOR(S): Van Haverbeke, Y.; Maquestiau, A.; Vanden Eynde, J. J.  
 CORPORATE SOURCE: Serv. Chim. Org., Univ. Etat Mons, Mons, 7000, Belg.  
 SOURCE: Journal of Heterocyclic Chemistry (1979),  
 16(4), 773-7  
 CODEN: JHTCAD; ISSN: 0022-152X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: French  
 OTHER SOURCE(S): CASREACT 91:123667  
 ED Entered STN: 12 May 1984  
 GI



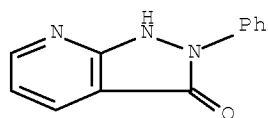
AB The reaction between 1-methyl-5-amino-1,2-dihydro-3H-pyrazol-3-one and 2-phenyl-5-amino-2,4-dihydro-3H-pyrazol-3-one with  $\beta$ -dicarbonyl compound gave the pyrazolopyridines I and II ( $R = H, Me, Ph, CO_2Me, CF_3, Ph, CO_2Et$ ;  $R_1 = H, Ph, Me$ ;  $R_2 = H, Me, Ph, OH$ ), resp. Pyrazolopyrimidines, e.g. III, were similarly prepared The orientation of the cyclocondensation is dependent on the nature of each precursor.

IT 53868-57-8P 71290-75-0P 71290-76-1P  
 71290-77-2P 71290-78-3P 71290-80-7P  
 71290-81-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 53868-57-8 HCAPLUS  
 CN 3H-Pyrazolo[3,4-b]pyridin-3-one, 1,2-dihydro-2,5-diphenyl- (CA INDEX  
 NAME)



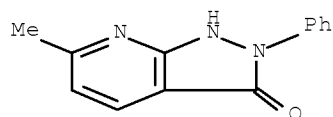
RN 71290-75-0 HCAPLUS

CN 3H-Pyrazolo[3,4-b]pyridin-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



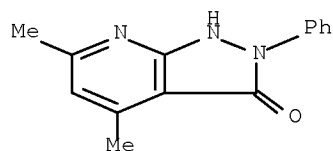
RN 71290-76-1 HCAPLUS

CN 3H-Pyrazolo[3,4-b]pyridin-3-one, 1,2-dihydro-6-methyl-2-phenyl- (CA INDEX NAME)



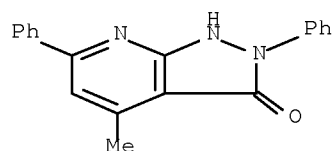
RN 71290-77-2 HCAPLUS

CN 3H-Pyrazolo[3,4-b]pyridin-3-one, 1,2-dihydro-4,6-dimethyl-2-phenyl- (CA INDEX NAME)



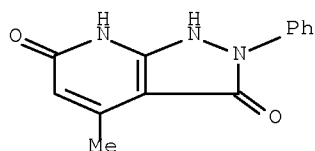
RN 71290-78-3 HCAPLUS

CN 3H-Pyrazolo[3,4-b]pyridin-3-one, 1,2-dihydro-4-methyl-2,6-diphenyl- (CA INDEX NAME)

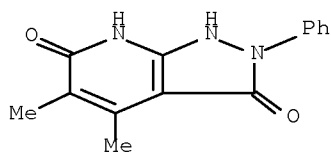


RN 71290-80-7 HCAPLUS

CN 1H-Pyrazolo[3,4-b]pyridine-3,6(2H,7H)-dione, 4-methyl-2-phenyl- (CA INDEX NAME)

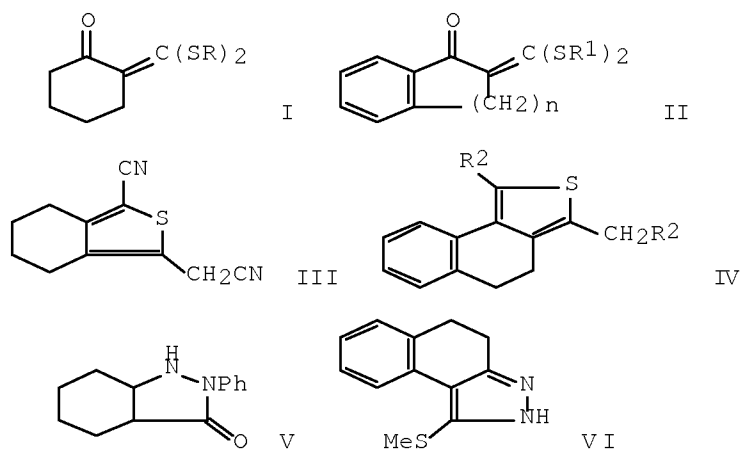


RN 71290-81-8 HCAPLUS  
 CN 1H-Pyrazolo[3,4-b]pyridine-3,6(2H,7H)-dione, 4,5-dimethyl-2-phenyl- (CA INDEX NAME)



L5 ANSWER 81 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1979:474370 HCAPLUS Full-text  
 DOCUMENT NUMBER: 91:74370  
 ORIGINAL REFERENCE NO.: 91:12017a,12020a  
 TITLE: Synthesis and reactions of carbocyclic  
 acylketene-S,S-acetals  
 AUTHOR(S): Augustin, M.; Groth, C.  
 CORPORATE SOURCE: Sek. Chem., Martin-Luther-Univ. Halle-Wittenberg,  
 Halle/Saale, DDR-402, Ger. Dem. Rep.  
 SOURCE: Journal fuer Praktische Chemie (Leipzig) (1979  
 ), 321(2), 215-25  
 CODEN: JPCEAO; ISSN: 0021-8383  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 OTHER SOURCE(S): CASREACT 91:74370  
 ED Entered STN: 12 May 1984  
 GI





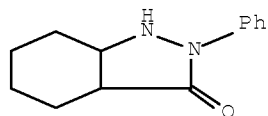
AB Cyclohexanone, 1-tetralone and 1-indanone were treated with CS<sub>2</sub> in the presence of bases, followed by the reaction with alkyl halides to give I (R = Me; RR = CH<sub>2</sub>CH<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>) or II (R<sub>1</sub> = Me, Et, PhCH<sub>2</sub>, CH<sub>2</sub>CO<sub>2</sub>Et, CH<sub>2</sub>CN, CH<sub>2</sub>CONH<sub>2</sub>; R<sub>1</sub>R<sub>1</sub> = CH<sub>2</sub>CH<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>; n = 1, 2); in some cases the thiophenes III and IV (R<sub>2</sub> = CO<sub>2</sub>Et, CN, CONH<sub>2</sub>) were formed. Reaction of I (R = Me) and II (R<sub>1</sub> = Me, n = 1, 2) with mono- or dinucleophiles resulted in the substitution of one or both MeS groups to give, e.g., II (n = 1, 2; R<sub>1</sub>R<sub>1</sub> = NHCH<sub>2</sub>CH<sub>2</sub>NH, NHCH<sub>2</sub>CH<sub>2</sub>O, NH-o-C<sub>6</sub>H<sub>4</sub>NH, etc.). Reaction with hydrazines gave V and VI.

IT 70972-70-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 70972-70-2 HCAPLUS

CN 3H-Indazol-3-one, octahydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 82 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1979:168590 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 90:168590

ORIGINAL REFERENCE NO.: 90:26767a, 26770a

TITLE: Hexahydroindazolones

INVENTOR(S): Drewes, Harold R.

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: U.S., 4 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.

KIND

DATE

APPLICATION NO.

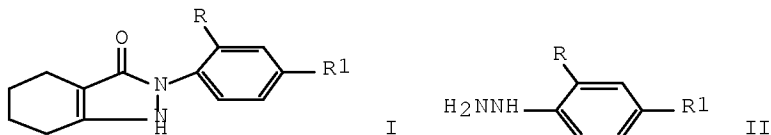
DATE

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US 4139710	A	19790213	US 1977-776719	19770311 <--
JP 53112873	A	19781002	JP 1978-26103	19780309 <--
JP 58045427	B	19831008		

PRIORITY APPLN. INFO.:

		US 1977-776719	A	19770311 <--
		US 1977-777322	A	19770314 <--
		US 1977-780904	A	19770324 <--

OTHER SOURCE(S): CASREACT 90:168590  
 ED Entered STN: 12 May 1984  
 GI



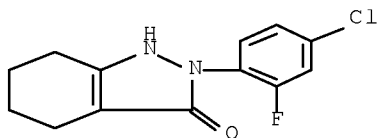
AB Indazolones I (R = H, F, Cl; R1 = F, Cl, Bu, I, CN, MeO, NO2), useful as herbicides (no data), were prepared by the cyclocondensation of hydrazines II and 2-oxocyclohexanecarboxamide (III). Thus, to a mixture of II (R = F, R1 = Cl) and HCl adjusted to pH 3.8-4.0 and at 90-95° was added III. This mixture was heated for 1-2 h at 90-95° to give I (R = F, R1 = Cl). III was prepared in 76% yield by heating cyclohexanone with urea and (NH4)2CO3 at 135°. Successive diazotization and Na2S2O4 reduction of 2,4-FC1C6H3NH2 followed by treatment with concentrated HCl and heating at 75° for 2 h gave II (R = F, R1 = Cl).HCl.

IT 64513-04-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 64513-04-8 HCAPLUS

CN 3H-Indazol-3-one, 2-(4-chloro-2-fluorophenyl)-1,2,4,5,6,7-hexahydro- (CA INDEX NAME)



L5 ANSWER 83 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1979:152175 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 90:152175

ORIGINAL REFERENCE NO.: 90:24197a,24200a

TITLE: Tetrahydroindazole herbicides

INVENTOR(S): Wolf, Anthony D.

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

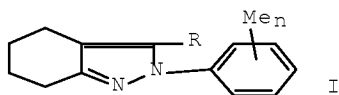
SOURCE: U.S., 12 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4124373	A	19781107	US 1977-756439	19770103 <--
PRIORITY APPLN. INFO.:			US 1977-756439	A 19770103 <--
ED Entered STN:		12 May 1984		
GI				



AB Indazoles I (R = Cl, Br, Be; n = 0-3) were prepared Thus, a mixture of 2-carboxycyclohexanone Me and Et esters were treated with PhNHNH2 and the resulting indazolone treated with POCl3 to give I (R = Cl, n = 0). At 2 kg/ha postemergence, I (R = Cl, n = 0) gave 100% kill of, e.g., morning glory.

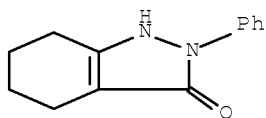
IT 62221-94-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and halogenation of)

RN 62221-94-7 HCAPLUS

CN 3H-Indazol-3-one, 1,2,4,5,6,7-hexahydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 84 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1978:615535 HCAPLUS Full-text

DOCUMENT NUMBER: 89:215535

ORIGINAL REFERENCE NO.: 89:33497a,33500a

TITLE: Cyclometalation reactions of o-hydroxydiarylazo compounds

AUTHOR(S): Steiner, Eginhard; L'Eplattenier, Francois A.

CORPORATE SOURCE: Zent. Forschungslab., Ciba-Geigy A.-G., Basel, Switz.

SOURCE: Helvetica Chimica Acta (1978), 61(6), 2264-8

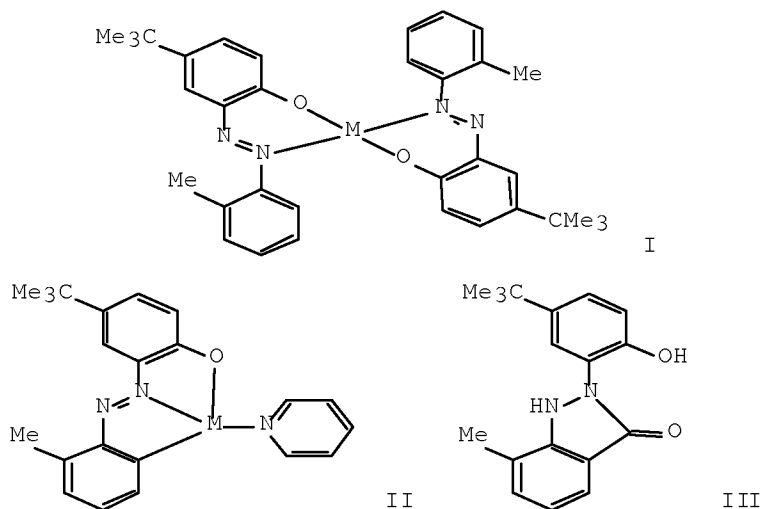
CODEN: HCACAV; ISSN: 0018-019X

DOCUMENT TYPE: Journal

LANGUAGE: German

ED Entered STN: 12 May 1984

GI



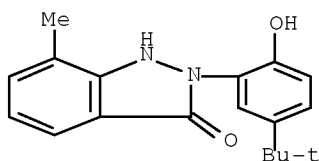
AB The metalation of o-hydroxy diarylazo ligands (e.g. o-MeC<sub>6</sub>H<sub>4</sub>N:NC<sub>6</sub>H<sub>3</sub>(CMe<sub>3</sub>)(OH)-5,3) with Pt(II)- or Pd(II)-salts K<sub>2</sub>MCl<sub>4</sub> (M = Pt, Pd) leads not only to the classical complexes (e.g., I) but also to coordination compds. (e.g., II), containing a metal-carbon bond. The latter coordinate CO which can be inserted into the metal-carbon bond, thus leading after reductive elimination of the metal to heterocyclic products (e.g., III).

IT 68354-52-9F

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 68354-52-9 HCAPLUS

CN 3H-Indazol-3-one, 2-[5-(1,1-dimethylethyl)-2-hydroxyphenyl]-1,2-dihydro-7-methyl- (CA INDEX NAME)



L5 ANSWER 85 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1978:509471 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 89:109471

ORIGINAL REFERENCE NO.: 89:16877a

TITLE: Chlorinated indazoles

INVENTOR(S): Fost, Dennis Lynn; Wolf, Anthony David

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: U.S., 4 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

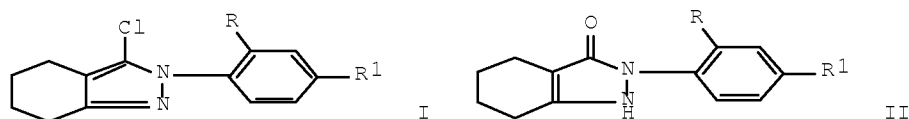
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4084055	A	19780411	US 1977-780904	19770324 <--
JP 53112873	A	19781002	JP 1978-26103	19780309 <--
JP 58045427	B	19831008		

PRIORITY APPLN. INFO.:  
 US 1977-776719 A 19770311 <--  
 US 1977-777322 A 19770314 <--  
 US 1977-780904 A 19770324 <--

ED Entered STN: 12 May 1984  
GI

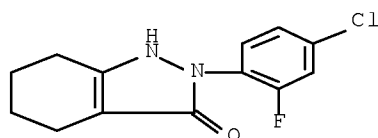


AB The indazoles I (R = H, F, Cl; R1 = F, Cl, Br, iodo, CN, MeO, NO2) were prepared by chlorination of II with COCl2. Thus, II (R = F, R1 = Cl) in PhCl was treated with COCl2 at 130° for 4 h in an autoclave to give I (R = F, R1 = Cl) (90.7% pure).

IT 64513-04-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (chlorination of, by phosgene)

RN 64513-04-8 HCAPLUS

CN 3H-Indazol-3-one, 2-(4-chloro-2-fluorophenyl)-1,2,4,5,6,7-hexahydro- (CA INDEX NAME)



L5 ANSWER 86 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1978:192756 HCAPLUS Full-text

DOCUMENT NUMBER: 88:192756

ORIGINAL REFERENCE NO.: 88:30321a,30324a

TITLE: Dioxopyrazolopyridine derivatives

INVENTOR(S): Sawaguchi, Hiroshi; Sugiyama, Masatoshi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.  
 CODEN: JKXXAF

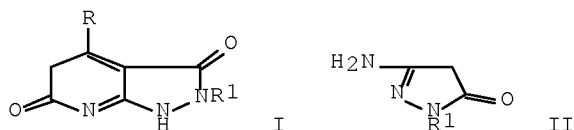
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 52112626	A	19770921	JP 1976-27939	19760315 <--
PRIORITY APPLN. INFO.:			JP 1976-27939	A 19760315 <--
ED Entered STN: 12 May 1984				
GI				



AB I (R = alkyl, aryl, alkoxycarbonyl, carboxy, R1 = alkyl, aryl, 5-6 member heterocycle residue) useful as intermediates for oxonols and merocyanines were prepared by condensation of II and RCOCH<sub>2</sub>CO<sub>2</sub>R<sub>2</sub> (R<sub>2</sub> = alkyl, aryl) in the presence of acid. For example, 3-amino-1-(4-sulfophenyl)pyrazolin-5-one triethylamine salt [63479-47-0] was treated with Et acetoacetate [141-97-9] in the presence of AcOH to give I (R = Me, R1 = 4-C<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H·NEt<sub>3</sub>) [65563-44-2].

IT 65563-44-2P

RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of)

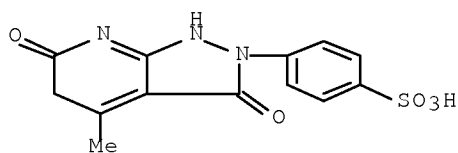
RN 65563-44-2 HCAPLUS

CN Benzenesulfonic acid, 4-(1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl)-, compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 65563-43-1

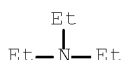
CMF C13 H11 N3 O5 S



CM 2

CRN 121-44-8

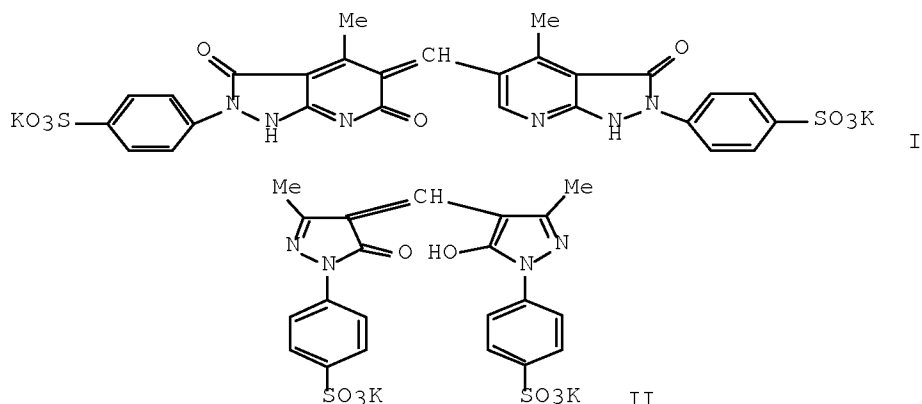
CMF C6 H15 N



L5 ANSWER 87 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1978:154344 HCAPLUS Full-text  
 DOCUMENT NUMBER: 88:154344  
 ORIGINAL REFERENCE NO.: 88:24320h,24321a  
 TITLE: Methine dyes  
 INVENTOR(S): Sugiyama, Masatoshi; Sawaguchi, Hiroshi; Mitsui, Akio  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 52135335	A	19771112	JP 1976-52994	19760510 <--
JP 58035544	B	19830803		
GB 1551653	A	19790830	GB 1977-18769	19770504 <--
US 4102688	A	19780725	US 1977-795041	19770509 <--
DE 2720982	A1	19771124	DE 1977-2720982	19770510 <--
PRIORITY APPLN. INFO.:			JP 1976-52994	A 19760510 <--

ED Entered STN: 12 May 1984  
 GI



AB Pyrazolo[3,4-b]pyridine ring-containing methine dyes with  $\gamma_{\max}$  at longer wavelength and good bleachability by sulfite in photog. developers were prepared For example, 3-amino-1-(4-sulfophenyl)pyrazolin-5-one triethylamine salt [63479-47-0] was treated with Et acetoacetate [141-97-9] in refluxing AcOH to give 4-methyl-2-(4-sulfophenyl)pyrazolo[3,4-b]pyridine-3,6-dione triethylamine salt [65563-44-2] which was condensed with orthoformate to give I [65620-37-3] with  $\gamma_{\max}$  (H<sub>2</sub>O) 600 nm, compared with 430 nm for II.

IT 65563-44-2P

RL: PREP (Preparation)

(manufacture and condensation with orthoformate)

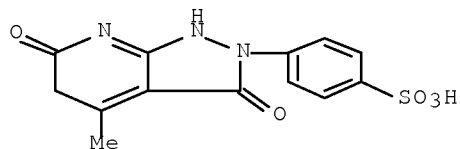
RN 65563-44-2 HCAPLUS

CN Benzenesulfonic acid, 4-(1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl)-, compd. with N,N-diethylethanamine (1:1)  
(9CI) (CA INDEX NAME)

CM 1

CRN 65563-43-1

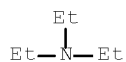
CMF C13 H11 N3 O5 S



CM 2

CRN 121-44-8

CMF C6 H15 N



IT 65563-44-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with (anilino)vinyl)(sulfopropyl)benzothiazolium)

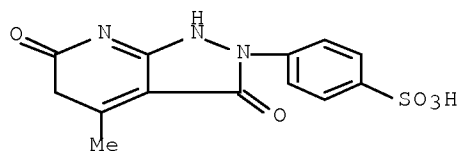
RN 65563-44-2 HCAPLUS

CN Benzenesulfonic acid, 4-(1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl)-, compd. with N,N-diethylethanamine (1:1)  
(9CI) (CA INDEX NAME)

CM 1

CRN 65563-43-1

CMF C13 H11 N3 O5 S

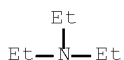


CM 2

CRN 121-44-8

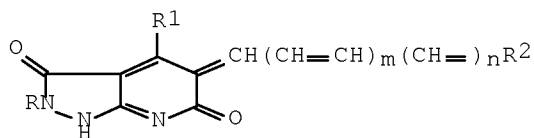


CMF C6 H15 N

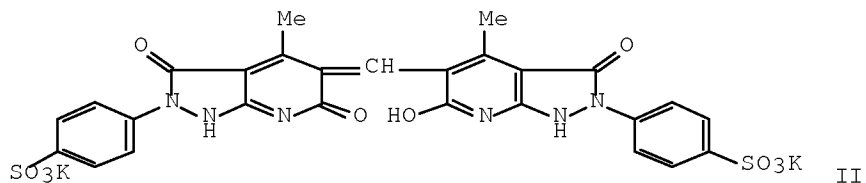


L5 ANSWER 88 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1978:106766 HCAPLUS Full-text  
 DOCUMENT NUMBER: 88:106766  
 ORIGINAL REFERENCE NO.: 88:16753a,16756a  
 TITLE: Methine dyes and light-sensitive photographic material  
 containing them  
 INVENTOR(S): Sugiyama, Masatoshi; Sawaguchi, Hiroshi; Mitsui, Akio  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Ger. Offen., 82 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2720982	A1	19771124	DE 1977-2720982	19770510 <--
JP 52135335	A	19771112	JP 1976-52994	19760510 <--
JP 58035544	B	19830803		
PRIORITY APPLN. INFO.:			JP 1976-52994	A 19760510 <--
ED Entered STN: 12 May 1984				
GI				



I



II

AB Methine dyes (I; R = alkyl, aralkyl, aryl, 5- or 6-membered-ring heterocyclic residue, H; R1 = alkyl, aralkyl, aryl, 5- or 6-membered-ring heterocyclic residue, CO2H, alkoxy carbonyl, aryloxy carbonyl, NH2; R2 = heterocyclic residue, aniline derivative; m, n = 0, 1) are prepared and used in photog. emulsions; they absorb at long  $\lambda$  and are easily and irreversibly decolorized in the developing process. Thus, a mixture of 3-amino-1-(4-sulfophenyl)pyrazolin-5-one triethylamine salt [63479-47-0] and Et acetoacetate [141-97-9] in HOAc was heated to give 4-methyl-2-(4-

Serial No.:11/880,002

sulfophenyl)pyrazolo[3,4-b]pyridine-3,6-dione triethylamine salt [65563-44-2]  
which was treated with Et orthoformate followed by KI to give II [65620-37-3],  $\lambda_{\text{max}}$  600 nm (H<sub>2</sub>O), 610 nm (MeOH).

IT 65563-44-2F

RL: IMF (Industrial manufacture); PREP (Preparation)  
(preparation of)

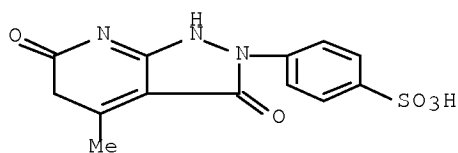
RN 65563-44-2 HCAPLUS

CN Benzenesulfonic acid, 4-(1,3,5,6-tetrahydro-4-methyl-3,6-dioxo-2H-pyrazolo[3,4-b]pyridin-2-yl)-, compd. with N,N-diethylethanamine (1:1)  
(9CI) (CA INDEX NAME)

CM 1

CRN 65563-43-1

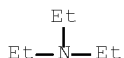
CMF C13 H11 N3 O5 S



CM 2

CRN 121-44-8

CMF C6 H15 N



L5 ANSWER 89 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1977:568025 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 87:168025

ORIGINAL REFERENCE NO.: 87:26555a,26558a

TITLE: Substituted cycloalkanopyrazoles and their herbicidal use

INVENTOR(S): Goddard, Steven Jerome; Wolf, Anthony David

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: Ger. Offen., 121 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

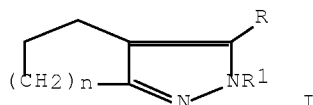
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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DE 2701467	A1	19770728	DE 1977-2701467	19770114 <--
US 4111681	A	19780905	US 1976-720801	19760909 <--

Serial No.:11/880,002

US 4123252	A	19781031	US 1976-726295	19760924 <--
US 4124374	A	19781107	US 1976-727362	19760927 <--
DK 7605749	A	19770717	DK 1976-5749	19761221 <--
BR 7700240	A	19770920	BR 1977-240	19770113 <--
BE 850388	A1	19770714	BE 1977-174085	19770114 <--
NL 7700397	A	19770719	NL 1977-397	19770114 <--
JP 52089670	A	19770727	JP 1977-2570	19770114 <--
FR 2338263	A1	19770812	FR 1977-1063	19770114 <--
GB 1539846	A	19790207	GB 1977-1543	19770114 <--
IL 51266	A	19800630	IL 1977-51266	19770114 <--
AU 7721363	A	19780727	AU 1977-21363	19770117 <--
SU 668566	A3	19790615	SU 1977-2439559	19770117 <--
PRIORITY APPLN. INFO.:			US 1976-649901	A 19760116 <--
			US 1976-655842	A 19760206 <--
			US 1976-720801	A 19760909 <--
			US 1976-726295	A 19760924 <--
			US 1976-727362	A 19760927 <--
			TW 1976-6510765	A 19760413 <--

ED Entered STN: 12 May 1984  
GI

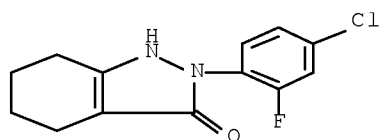


AB Cycloalkanopyrazoles I ( $n = 1-3$ ;  $R = \text{OMe, Me, Br, CN}$ ;  $R1 = \text{substituted phenyl}$ ) were prepared. Thus, 2-FC6H4NHAc was chlorinated, 2,4-FC1C6H3NHAc hydrolyzed, 2,4-FC1C6H3NH2 treated with  $\text{NaNO}_2$ , 2,4-FC1C6H3NHNH2 condensed with 2-ethoxycarbonylcyclohexanone, and the hexahydroindazolone treated with  $\text{Me}_2\text{SO}_4$  to give I ( $R = \text{OMe}$ ,  $R1 = 2,4\text{-FC1C6H}_3$ ,  $n = 2$ ), which was herbicidal at 2 kg/ha post-emergence.

IT 64513-04-8P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and methylation of)

RN 64513-04-8 HCAPLUS

CN 3H-Indazol-3-one, 2-(4-chloro-2-fluorophenyl)-1,2,4,5,6,7-hexahydro- (CA INDEX NAME)

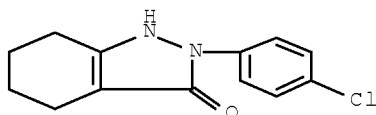


IT 64486-21-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 64486-21-1 HCAPLUS

Serial No.:11/880,002

CN 3H-Indazol-3-one, 2-(4-chlorophenyl)-1,2,4,5,6,7-hexahydro- (CA INDEX NAME)



L5 ANSWER 90 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1977:468350 HCAPLUS Full-text  
DOCUMENT NUMBER: 87:68350  
ORIGINAL REFERENCE NO.: 87:10889a,10892a  
TITLE: Cycloalkanepyrroles useful as herbicides  
INVENTOR(S): Wolf, Anthony David  
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA  
SOURCE: Ger. Offen., 140 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2646628	A1	19770421	DE 1976-2646628	19761015 <--
SE 7610459	A	19770416	SE 1976-10459	19760921 <--
FR 2327990	A1	19770513	FR 1976-30753	19761013 <--
FR 2327990	B1	19830624		
BR 7606869	A	19770830	BR 1976-6869	19761013 <--
AU 7618598	A	19780420	AU 1976-18598	19761013 <--
AU 516551	B2	19810611		
SU 670196	A3	19790625	SU 1976-2407713	19761013 <--
DK 7604641	A	19770416	DK 1976-4641	19761014 <--
FI 7602929	A	19770416	FI 1976-2929	19761014 <--
NL 7611362	A	19770419	NL 1976-11362	19761014 <--
JP 52051365	A	19770425	JP 1976-122368	19761014 <--
ZA 7606125	A	19780530	ZA 1976-6125	19761014 <--
IL 50676	A	19791031	IL 1976-50676	19761014 <--
CA 1071216	A1	19800205	CA 1976-263344	19761014 <--
CS 195736	B2	19800229	CS 1976-6660	19761014 <--
HU 23886	A2	19821028	HU 1976-DU259	19761014 <--
BE 847340	A1	19770415	BE 1976-171550	19761015 <--
AT 7607705	A	19800315	AT 1976-7705	19761015 <--
AT 359328	B	19801110		
PL 117660	B1	19810831	PL 1976-193059	19761015 <--
RO 72558	A1	19820909	RO 1976-88024	19761015 <--
US 4108628	A	19780822	US 1977-841452	19771012 <--
PRIORITY APPLN. INFO.:			US 1975-622763	A 19751015 <--
			US 1975-640348	A 19751212 <--
			US 1976-717014	A 19760826 <--
			US 1976-714014	A 19760826 <--

ED Entered STN: 12 May 1984

GI For diagram(s), see printed CA Issue.

AB Herbicidal pyrazoles (I; R = Br, Cl, F, I; R1 = e.g. H, F; R2 = e.g. H, Cl, F, MeO; R3 = e.g. Br, Cl, F, MeO, NO2, CN; R4 = e.g. H, Cl, F; n = 3, 4, 5) are

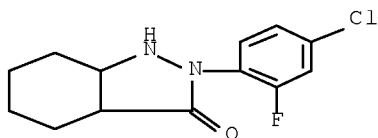
prepared by cyclocondensation of a phenylhydrazine with a cycloalkanone and reaction of the resulting pyrazolone with phosphoryl halide. Thus, 2-FC<sub>6</sub>H<sub>4</sub>NHAc is converted to 2,4-FC<sub>6</sub>H<sub>3</sub>NHAc which is hydrolyzed to give 2,4-FC<sub>6</sub>H<sub>3</sub>NH<sub>2</sub> (II). Diazotization of II and reduction of the diazonium salt with NaHSO<sub>3</sub> gives 2,4-FC<sub>6</sub>H<sub>3</sub>NHNH<sub>2</sub>.HCl (III). Cyclocondensation of 15.8 parts III with 13 parts Et 2-oxocyclohexanecarboxylate in EtOH in presence of Et<sub>3</sub>N gives after 24 h reflux 16.1 parts crude 2-(4-chloro-2-fluorophenyl)-1,2,4,5,6,7-hexahydro-3H-indazol-3-one (IV). Reaction of 10 parts IV with 7.3 parts POCl<sub>3</sub> 6 h at 130-50° gives 7.8 parts I (R = R<sub>3</sub> = Cl, R<sub>1</sub> = F, R<sub>2</sub> = R<sub>4</sub> = H, n = 4). In all .apprx.70 I are prepared and extensively tested.

IT 63419-57-8P 63592-62-1F

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, and reaction with phosphoryl halides)

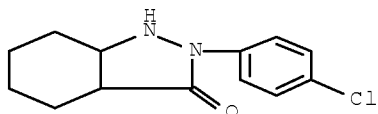
RN 63419-57-8 HCAPLUS

CN 3H-Indazol-3-one, 2-(4-chloro-2-fluorophenyl)octahydro- (CA INDEX NAME)



RN 63592-62-1 HCAPLUS

CN 3H-Indazol-3-one, 2-(4-chlorophenyl)octahydro- (CA INDEX NAME)



L5 ANSWER 91 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1977:468227 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 87:68227

ORIGINAL REFERENCE NO.: 87:10861a,10864a

TITLE: Synthesis of indazolo[3,2-b]benzoxazoles

AUTHOR(S): Reddy, G. Shekhar; Reddy, K. Kondal

CORPORATE SOURCE: Dep. Chem., Osmania Univ., Hyderabad, India

SOURCE: Indian Journal of Chemistry, Section B: Organic  
Chemistry Including Medicinal Chemistry (1977  
, 15(1), 84-5

CODEN: IJSBDB; ISSN: 0376-4699

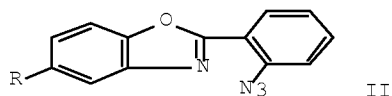
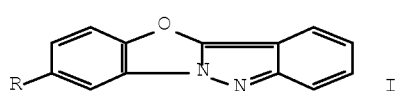
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 87:68227

ED Entered STN: 12 May 1984

GI



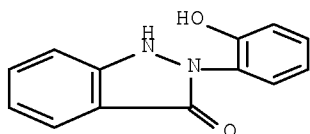
AB The indazolo[3,2-b]benzoxazoles I (R = H, Me) were prepared by thermal and photochem. decomposition of the azidobenzoxazoles II. II were obtained from 4,2-R(H<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>OH and o-N<sub>3</sub>C<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H in the presence of polyphosphate ester. Catalytic hydrogenation and stability of the new ring system towards acid and alkali cleavage were studied.

IT 63586-51-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 63586-51-6 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-(2-hydroxyphenyl)- (CA INDEX NAME)



L5 ANSWER 92 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1977:139924 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 86:139924

ORIGINAL REFERENCE NO.: 86:21969a,21972a

TITLE: A convenient synthesis of 3-imino-2-phenylindazolines

AUTHOR(S): Yamamoto, Yasuhiro; Yamazaki, Hiroshi

CORPORATE SOURCE: Inst. Phys. Chem. Res., Wako, Japan

SOURCE: Synthesis (1976), (11), 750-1

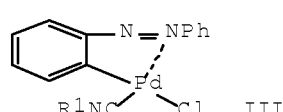
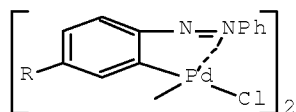
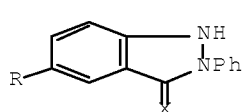
CODEN: SYNTBF; ISSN: 0039-7881

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 12 May 1984

GI



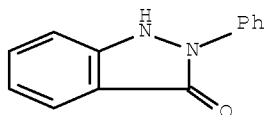
AB Indazoles I (R = H, OMe; X = NCMe<sub>3</sub>, cyclohexylimino, NC<sub>6</sub>H<sub>4</sub>Me-2) were prepared by treating the Pd complexes II with R<sub>1</sub>NC and thermal decomposition of the complexes III. Reaction of I (R = H, X = NCMe<sub>3</sub>) with CO gave I (X = O).

IT 17049-65-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 17049-65-9 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 93 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1977:120822 HCAPLUS Full-text

DOCUMENT NUMBER: 86:120822

ORIGINAL REFERENCE NO.: 86:19071a,19074a

TITLE: A simple synthesis of cyclohexanone-2-carboxamide and its reactions

AUTHOR(S): Bischoff, Christian; Herma, Hannelore

CORPORATE SOURCE: Zentralinst. Org. Chem., DAW, Berlin, Ger. Dem. Rep.

SOURCE: Journal fuer Praktische Chemie (Leipzig) (1976), 318(5), 773-8  
CODEN: JPCEAO; ISSN: 0021-8383

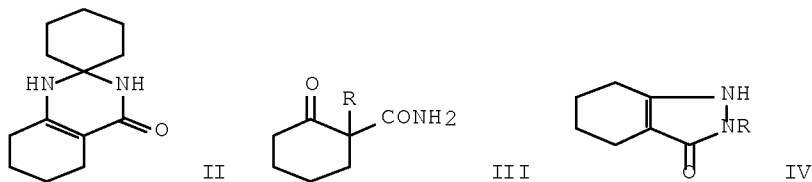
DOCUMENT TYPE: Journal

LANGUAGE: German

OTHER SOURCE(S): CASREACT 86:120822

ED Entered STN: 12 May 1984

GI

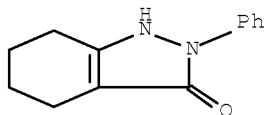


AB The title compound (I) was prepared by treating cyclohexanone with urea and acid decomposition of the adduct II. Decomposition of I with KOH gave pimelic acid. Alkylation of I gave III (R = C<sub>2</sub>-8 n-alkyl), which were decarboxylated with acid or alkaline I cyclized with hydrazines to IV (R<sub>1</sub> = H, Ph). With cyclohexylamine I gave dicyclohexylurea, whereas with 3-R<sub>2</sub>C<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> (R<sub>2</sub> = H, OMe) it formed enamines.

IT 62221-94-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

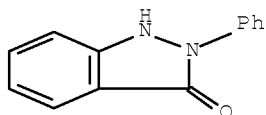
RN 62221-94-7 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2,4,5,6,7-hexahydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 94 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1975:531587 HCAPLUS Full-text  
 DOCUMENT NUMBER: 83:131587  
 ORIGINAL REFERENCE NO.: 83:20705a,20708a  
 TITLE: Indazolone derivatives  
 INVENTOR(S): Kraus, Theodore C.; Noack, Manfred G.  
 PATENT ASSIGNEE(S): Olin Corp., USA  
 SOURCE: U.S., 5 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3879416	A	19750422	US 1972-268303	19720703 <--
PRIORITY APPLN. INFO.:			US 1972-268303	A 19720703 <--

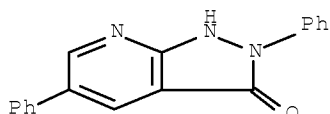
ED Entered STN: 12 May 1984  
 GI For diagram(s), see printed CA Issue.  
 AB Indazolone derivs. (I, II) were prepared by reacting azobenzene or azoxybenzene with CO at high temperature and pressure in the presence of Pd(py)<sub>2</sub>Cl<sub>2</sub>. Thus, 4.5 g azobenzene in 6.5 g Pd(py)<sub>2</sub>Cl<sub>2</sub> was treated with 3150 psig CO at 200° and the reaction mixture filtered to give 1.9 g I, and the filtrate on addition of petroleum ether gave a mixture of I and II.  
 IT 17049-65-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
 RN 17049-65-9 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 95 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1974:520150 HCAPLUS Full-text  
 DOCUMENT NUMBER: 81:120150  
 ORIGINAL REFERENCE NO.: 81:18983a,18986a  
 TITLE: Synthesis and reactions of 2-aryl-3-



(dimethylamino)acroleins  
 AUTHOR(S): Coppola, Gary M.; Hardtmann, Goetz E.; Huegi, Bruno S.  
 CORPORATE SOURCE: Chem. Res. Dep., Sandoz-Wander, Inc., Hanover, NJ, USA  
 SOURCE: Journal of Heterocyclic Chemistry (1974),  
 11(1), 51-6  
 CODEN: JHTCAD; ISSN: 0022-152X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ED Entered STN: 12 May 1984  
 GI For diagram(s), see printed CA Issue.  
 AB The preparation of novel 2-aryl-3-(dimethylamino)acroleins I (R = NMe<sub>2</sub>, NHPH, piperidino, 4-methyl-1-piperazinyl; R<sub>1</sub> = H, NO<sub>2</sub>; R<sub>2</sub> = H, Cl, MeO; R<sub>3</sub> = H, Cl, MeO; R<sub>4</sub> = H, MeO; or aryl = 2-naphthyl or 6-methoxy-2-naphthyl) from arylacetic acids by a modified Vilsmeier-Haack reaction and their hydrolyses to 2-arylmalonaldehydes is described. Reactions of the acroleins with amines are discussed as well as the conversion of the 2-arylmalonaldehydes into 3-chloro and 3-alkoxyacroleins.  
 IT 53868-57-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 53868-57-8 HCAPLUS  
 CN 3H-Pyrazolo[3,4-b]pyridin-3-one, 1,2-dihydro-2,5-diphenyl- (CA INDEX NAME)



L5 ANSWER 96 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1974:82790 HCAPLUS Full-text  
 DOCUMENT NUMBER: 80:82790  
 ORIGINAL REFERENCE NO.: 80:13324h,13325a  
 TITLE: Behavior of 2-pyrazolin-5-ones toward activated double bond systems. Cyanoethylation of 2-pyrazolin-5-ones  
 AUTHOR(S): Elnagdi, Mohamed Helmi; Ohta, Masaki  
 CORPORATE SOURCE: Fac. Sci., Tokyo Inst. Technol., Tokyo, Japan  
 SOURCE: Bulletin of the Chemical Society of Japan ( 1973), 46(12), 3818-21  
 CODEN: BCSJA8; ISSN: 0009-2673  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ED Entered STN: 12 May 1984  
 GI For diagram(s), see printed CA Issue.  
 AB 3-Methyl-2-pyrazolin-5-one (I) reacts with acrylonitrile to yield either 4,4-bis(β-cyanoethyl)-5-hydroxy-3-methylpyrazole or 1,4,4-tris(β-cyanoethyl)-3-methyl-2-pyrazolin-5-one depending on the amount of reagent and the reaction conditions. I reacts with ethyl acrylate or crotononitrile to yield the 4-alkylated II (R = EtO<sub>2</sub>CCH<sub>2</sub>CH<sub>2</sub>, NCCH<sub>2</sub>CHMe, resp.). 3-Methyl-1-phenyl-2-pyrazolin-5-one reacts with acrylonitrile to yield only the 4,4-bis(β-cyanoethyl) derivative III which on hydrolysis affords the corresponding dicarboxylic acid. 3-Amino-1-phenyl-2-pyrazolin-5-one (IV) adds to two molecules of ethyl acrylate or acrylonitrile to yield the 4,4-disubstituted derivs. V (R = R<sub>1</sub> = EtO<sub>2</sub>CCH<sub>2</sub>CH<sub>2</sub>, NCCH<sub>2</sub>CH<sub>2</sub>), but only to one molecule of

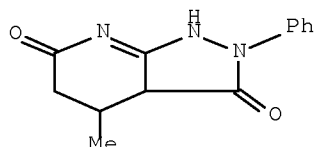
benzalacetophenone to yield the 4-substituted 3-amino-2-pyrazolin-5-one derivative V (R = PhCOCH<sub>2</sub>CHPh, R<sub>1</sub> = H). The pyrazolopiperidine derivative VI was obtained on treatment of IV with Ethyl crotonate in the presence of sodium ethoxide.

IT 51594-18-4F

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 51594-18-4 HCAPLUS

CN 2H-Pyrazolo[3,4-b]pyridine-3,6(3aH,7H)-dione, 4,5-dihydro-4-methyl-2-phenyl- (9CI) (CA INDEX NAME)



L5 ANSWER 97 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1973:71998 HCAPLUS Full-text

DOCUMENT NUMBER: 78:71998

ORIGINAL REFERENCE NO.: 78:11445a,11448a

TITLE: Pyrazolopyridines. II. Preparation of 3-substituted 2-aryl-2H-pyrazolo[4,3-b]pyridines. Acid-catalyzed cyclization of 2-[(arylamino)methyl]-3-nitropyridines

AUTHOR(S): Foster, H. E.; Hurst, J.

CORPORATE SOURCE: Sch. Pharm., Sunderland Polytech., Sunderland, UK

SOURCE: Journal of the Chemical Society, Perkin Transactions  
1: Organic and Bio-Organic Chemistry (1972-1999) (1973), (3), 319-24

CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 78:71998

ED Entered STN: 12 May 1984

GI For diagram(s), see printed CA Issue.

AB Reaction of 2-[(arylamino)methyl]-3-nitropyridines (I) with primary aromatic amines, HCl or EtOH gave 3-(arylamino)-, 3-chloro- or 3-ethoxy-2-arylpyrazolo[4,3-b]pyridines, resp. Thus, I (R = CO<sub>2</sub>Et) with p-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>Et gave 77% of the pyrazolo[4,3-b]pyridine (II). Cyclization of I (R = H, Cl, CO<sub>2</sub>Et, OMe) in AcOH gave the corresponding 2-arylpyrazolo[4,3-b]pyridin-3(2H)-ones.

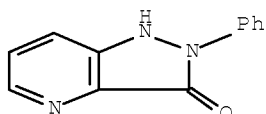
IT 40115-86-4F 40115-87-5F 40115-88-6F

40115-89-7F

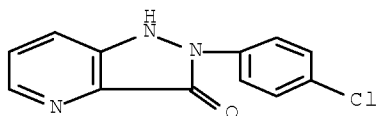
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 40115-86-4 HCAPLUS

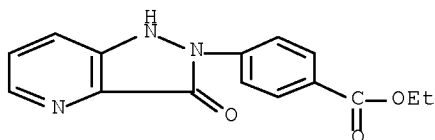
CN 3H-Pyrazolo[4,3-b]pyridin-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



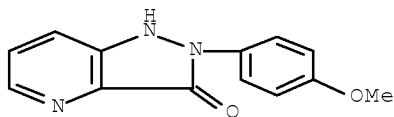
RN 40115-87-5 HCAPLUS  
 CN 3H-Pyrazolo[4,3-b]pyridin-3-one, 2-(4-chlorophenyl)-1,2-dihydro- (CA INDEX NAME)



RN 40115-88-6 HCAPLUS  
 CN Benzoic acid, 4-(1,3-dihydro-3-oxo-2H-pyrazolo[4,3-b]pyridin-2-yl)-, ethyl ester (CA INDEX NAME)



RN 40115-89-7 HCAPLUS  
 CN 3H-Pyrazolo[4,3-b]pyridin-3-one, 1,2-dihydro-2-(4-methoxyphenyl)- (CA INDEX NAME)



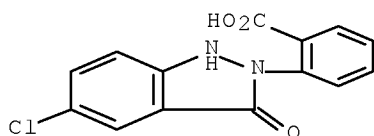
L5 ANSWER 98 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1972:564619 HCAPLUS Full-text  
 DOCUMENT NUMBER: 77:164619  
 ORIGINAL REFERENCE NO.: 77:27035a,27038a  
 TITLE: Chloro derivatives of indazolo[2,3-a][3,1]benzoxazin-5-one and indazolo[2,1-a]indazole-6,12-dione  
 AUTHOR(S): Lindsey, A. S.  
 CORPORATE SOURCE: Mater. Group., Natl. Phys. Lab., Teddington, UK  
 SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1972), (20), 2498-502  
 CODEN: JCPRB4; ISSN: 0300-922X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ED Entered STN: 12 May 1984

AB 2,2'-Azobenzenedicarboxylic acid with  $\text{PCl}_5$  (Freundler reaction) gave 8-chloroindazolo[2,3-a] [3,1]benzoxazin-5-one, 2-chloroindazolo[2,1-a]indazole-6,12-dione, and 10-chloroindazolo[2,3-a]-[3,1]benzoxazin-5-one ( $\alpha$  and  $\beta$  modifications) as the major products, and indazolo[2,1-a]indazole-6,12-dione as a minor product. The structures were assigned by independent syntheses, chemical behavior, and spectroscopy.

IT 38711-99-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 38711-99-8 HCAPLUS

CN Benzoic acid, 2-(5-chloro-1,3-dihydro-3-oxo-2H-indazol-2-yl)- (CA INDEX NAME)



L5 ANSWER 99 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1972:540065 HCAPLUS Full-text

DOCUMENT NUMBER: 77:140065

ORIGINAL REFERENCE NO.: 77:23037a,23040a

TITLE: Indazolone derivatives

INVENTOR(S): Soda, Kaoru; Shio, Masahisa

PATENT ASSIGNEE(S): Taisho Pharmaceutical Co., Ltd.

SOURCE: Jpn. Tokkyo Koho, 5 pp.  
 CODEN: JAXXAD

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 47029900	B4	19720804	JP 1970-42509	19700520 <--

ED Entered STN: 12 May 1984

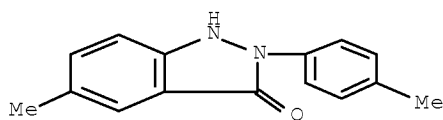
GI For diagram(s), see printed CA Issue.

AB The title compds. (I), useful as photosensi-tizers and antiinflammatants, were prepared 5-Chloro-N-p-tosylanthrnilic acid in PhMe was chlorinated with  $\text{PCl}_5$  followed by  $\text{AlCl}_3$ , and the resulting 4-chloro-2-(p- methylbenzoyl)-N-p-tosylanilide heated with concentrated  $\text{H}_2\text{SO}_4$  to give 4-chloro-2-(p-methylbenzoyl)aniline, which was diazotized with  $\text{HNO}_2$  and treated with 2% NaOH solution to cause rearrangement giving I ( $\text{R}_1 = \text{Cl}$ ,  $\text{R}_2 = \text{Me}$ ). Similarly prepared were 3 more I ( $\text{R}_1$ ,  $\text{R}_2$  given): Me, Me; Cl, OMe; Me, OMe.

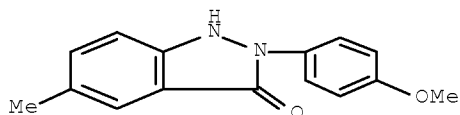
IT 17049-55-7P 28561-69-5P 28561-71-9P  
 28561-72-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

RN 17049-55-7 HCAPLUS

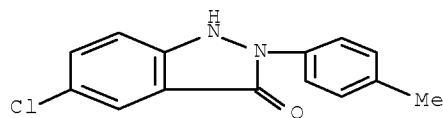
CN 3H-Indazol-3-one, 1,2-dihydro-5-methyl-2-(4-methylphenyl)- (CA INDEX NAME)



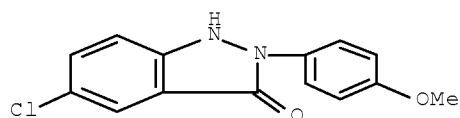
RN 28561-69-5 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-(4-methoxyphenyl)-5-methyl- (CA INDEX NAME)



RN 28561-71-9 HCAPLUS  
 CN 3H-Indazol-3-one, 5-chloro-1,2-dihydro-2-(4-methylphenyl)- (CA INDEX NAME)



RN 28561-72-0 HCAPLUS  
 CN 3H-Indazol-3-one, 5-chloro-1,2-dihydro-2-(4-methoxyphenyl)- (CA INDEX NAME)



L5 ANSWER 100 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1972:72377 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 76:72377  
 ORIGINAL REFERENCE NO.: 76:11652h,11653a  
 TITLE: Chemistry of nitro compounds. II. Scope and mechanism of the base-catalyzed transformations of N,N-disubstituted o-nitrobenzamides  
 AUTHOR(S): Spence, T. W. M.; Tennant, G.  
 CORPORATE SOURCE: Dep. Chem., Univ. Edinb., Edinburgh, UK  
 SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (

1972), (1), 97-102

CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 12 May 1984

GI For diagram(s), see printed CA Issue.

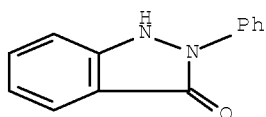
AB N-(Cyanomethyl)-o-nitrobenzamides (I; R = CN, R1 = Ph, CH2Ph, Me) were refluxed with NaOEt-EtOH to give 70-90% 1-hydroxy-quinazolin-2(1H)-ones (II) via an N-oxide intermediate. Similar treatment of the N-(benzoylmethyl)amide (I; R = Bz, R1 = Ph) or N-[(ethoxycarbonyl)methyl]amide (I; R = CO2Et, R1 = Ph) gave 2-phenylindazol-3-one (III). Hot aqueous Na2CO3-EtOH converted N-(1-cyanoethyl)-N-phenyl-o-nitrobenzamide into III and N,N'-diphenylazobenzene-2,2'-dicarboxamide (IV).

IT 17049-65-9F

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 17049-65-9 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 101 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1971:87046 HCAPLUS Full-text

DOCUMENT NUMBER: 74:87046

ORIGINAL REFERENCE NO.: 74:14133a,14136a

TITLE: Syntheses of heterocyclic compounds. CCCLXXVIII.  
Syntheses of azole derivatives. VI. Mass spectra of  
benzimidazolines and indazolines

AUTHOR(S): Kametani, Tetsuji; Hirata, Shoji; Shibuya, Shiroshi;  
Shio, Masahisa

CORPORATE SOURCE: Pharm. Inst., Tohoku Univ., Sendai, Japan

SOURCE: Organic Mass Spectrometry (1970), 4(Suppl.),  
395-404

CODEN: ORMSBG; ISSN: 0030-493X

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 12 May 1984

AB The electron-impact induced fragmentation of eleven substituted benzimidazolin-2-ones, five indazolin-3-ones, and 3-hydroxyindazoles were studied by conventional mass spectrometry including high resolution mass spectrometry. Although basic fragmentation patterns of these three series of compds. were similar to each other, the substituents on the nucleus altered the fragmentation patterns somewhat.

IT 17049-55-7 28561-69-5 28561-70-8

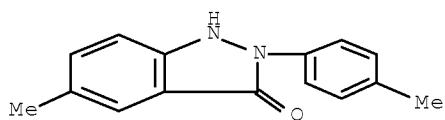
28561-71-9 28561-72-0

RL: PRP (Properties)

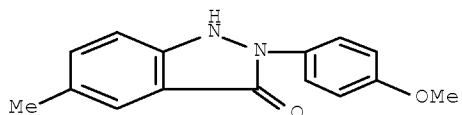
(mass spectrum of)

RN 17049-55-7 HCAPLUS

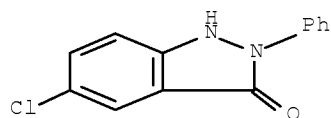
CN 3H-Indazol-3-one, 1,2-dihydro-5-methyl-2-(4-methylphenyl)- (CA INDEX  
NAME)



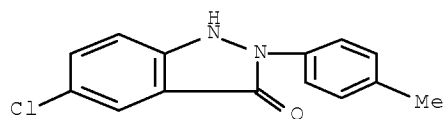
RN 28561-69-5 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-(4-methoxyphenyl)-5-methyl- (CA INDEX NAME)



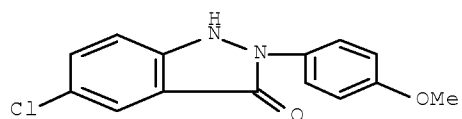
RN 28561-70-8 HCAPLUS  
 CN 3-Indazolinone, 5-chloro-2-phenyl- (6CI, 8CI) (CA INDEX NAME)



RN 28561-71-9 HCAPLUS  
 CN 3H-Indazol-3-one, 5-chloro-1,2-dihydro-2-(4-methylphenyl)- (CA INDEX NAME)



RN 28561-72-0 HCAPLUS  
 CN 3H-Indazol-3-one, 5-chloro-1,2-dihydro-2-(4-methoxyphenyl)- (CA INDEX NAME)



L5 ANSWER 102 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1971:53783 HCAPLUS Full-text  
 DOCUMENT NUMBER: 74:53783  
 ORIGINAL REFERENCE NO.: 74:8673a,8676a  
 TITLE: Indazolone derivatives  
 INVENTOR(S): Tsuji, Jiro; Takahashi, Hidenao  
 PATENT ASSIGNEE(S): Toray Industries, Inc.  
 SOURCE: Jpn. Tokkyo Koho, 3 pp.  
 CODEN: JAXXAD  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 45031170	B4	19701008	JP	19660304 <--

ED Entered STN: 12 May 1984

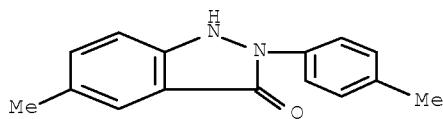
AB A complex of aromatic diazo compound with PdCl<sub>3</sub> is treated with CO. A mixture of 1.6 g azobenzene-PdCl<sub>3</sub> complex, 30 ml MeOH, and 150 kg/cm<sup>2</sup> CO was kept at 100° 5 hr to give 0.9 g 2-phenylindazolone, m. 204-5° (EtOH). Similarly prepared are 2-(p-tolyl)-6-methylindazolone, m. 234-6°, 2-(m-tolyl)-5-methylindazolone, m. 209-11°, 2-(o-tolyl)-4-methylindazolone, m. 168-9°, 2-(m-chlorophenyl)-5-chloroindazolone, m. 210-13°, 2-(o-chlorophenyl)-4-chloroindazolone, m. 197-9°, 2-phenyl-6-methylindazolone, m. 184-6°, and 2-phenyl-6-methoxyindazolone, m. 199-201°.

IT 17049-55-7P 17049-65-9P 30534-38-4P  
 30534-40-8P 30534-41-9P 30534-43-1P  
 30650-60-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

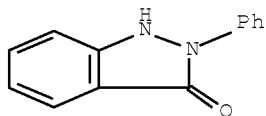
RN 17049-55-7 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-5-methyl-2-(4-methylphenyl)- (CA INDEX NAME)



RN 17049-65-9 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)

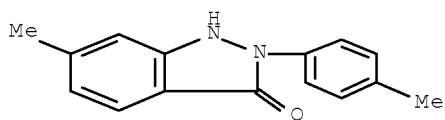


RN 30534-38-4 HCAPLUS



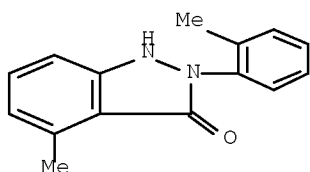
Serial No.:11/880,002

CN 3-Indazolinone, 6-methyl-2-p-tolyl- (8CI) (CA INDEX NAME)



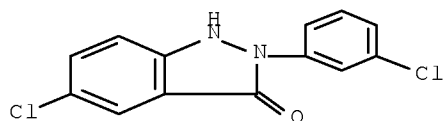
RN 30534-40-8 HCAPLUS

CN 3-Indazolinone, 4-methyl-2-o-tolyl- (8CI) (CA INDEX NAME)



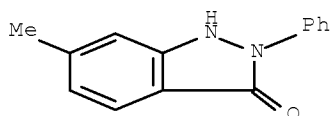
RN 30534-41-9 HCAPLUS

CN 3-Indazolinone, 5-chloro-2-(m-chlorophenyl)- (8CI) (CA INDEX NAME)



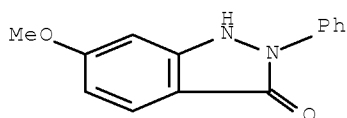
RN 30534-43-1 HCAPLUS

CN 3-Indazolinone, 6-methyl-2-phenyl- (8CI) (CA INDEX NAME)

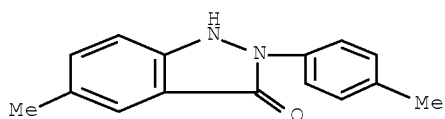


RN 30650-60-3 HCAPLUS

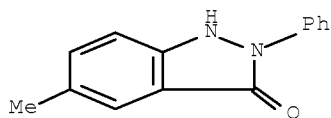
CN 3-Indazolinone, 6-methoxy-2-phenyl- (8CI) (CA INDEX NAME)



L5 ANSWER 103 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1970:477127 HCAPLUS Full-text  
 DOCUMENT NUMBER: 73:77127  
 ORIGINAL REFERENCE NO.: 73:12615a,12618a  
 TITLE: Synthesis of heterocyclic compounds. CCCLXVI.  
 Syntheses of azole derivatives. II. Syntheses of  
 N-(1-or 2-substituted)indazolones via diazotization  
 AUTHOR(S): Kametani, Tetsuji; Sota, Kaoru; Shio, Masahisa  
 CORPORATE SOURCE: Pharm. Inst., Tohoku Univ., Sendai, Japan  
 SOURCE: Journal of Heterocyclic Chemistry (1970),  
 7(4), 815-20  
 CODEN: JHTCAD; ISSN: 0022-152X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ED Entered STN: 12 May 1984  
 AB Syntheses of 2,5-disubstituted-indazolones and 3-hydroxy-1-substituted-1H-  
 indazoles were achieved by diazotization of 2-benzoylanilines and N-  
 benzoylhydrazines resp.  
 IT 17049-55-7P 17049-62-6P 28561-69-5P  
 28561-70-8P 28561-71-9P 28561-72-0P  
 28561-73-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 17049-55-7 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-5-methyl-2-(4-methylphenyl)- (CA INDEX  
 NAME)

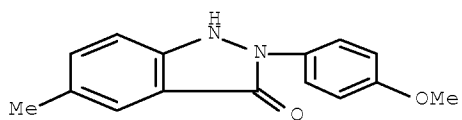


RN 17049-62-6 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-5-methyl-2-phenyl- (CA INDEX NAME)



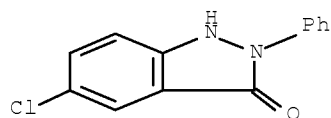
RN 28561-69-5 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-(4-methoxyphenyl)-5-methyl- (CA INDEX  
 NAME)

NAME)



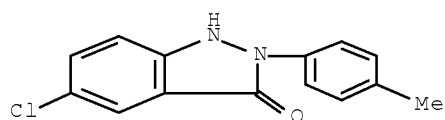
RN 28561-70-8 HCAPLUS

CN 3-Indazolinone, 5-chloro-2-phenyl- (6CI, 8CI) (CA INDEX NAME)



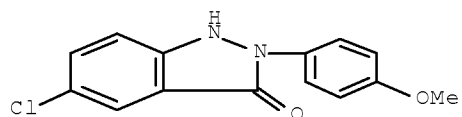
RN 28561-71-9 HCAPLUS

CN 3H-Indazol-3-one, 5-chloro-1,2-dihydro-2-(4-methylphenyl)- (CA INDEX NAME)



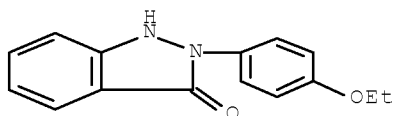
RN 28561-72-0 HCAPLUS

CN 3H-Indazol-3-one, 5-chloro-1,2-dihydro-2-(4-methoxyphenyl)- (CA INDEX NAME)

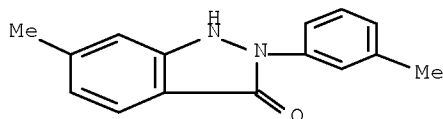


RN 28561-73-1 HCAPLUS

CN 3-Indazolinone, 2-(p-ethoxyphenyl)- (8CI) (CA INDEX NAME)



L5 ANSWER 104 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1968:101338 HCAPLUS Full-text  
 DOCUMENT NUMBER: 68:101338  
 ORIGINAL REFERENCE NO.: 68:19563a,19566a  
 TITLE: 2-(Phenylazo)phenyl complexes of the transition metals  
 AUTHOR(S): Heck, Richard F.  
 CORPORATE SOURCE: Res. Center, Hercules Inc., Wilmington, DE, USA  
 SOURCE: Journal of the American Chemical Society (1968  
 ), 90(2), 313-17  
 CODEN: JACSAT; ISSN: 0002-7863  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ED Entered STN: 12 May 1984  
 AB 2-(Phenylazo)phenyl metal derivs. of Co, Mn, and Re were prepared by a ligand-  
 exchange reaction of the metal carbonyl anions with chloro-2-  
 (phenylazo)phenylpalladium dimers.  
 IT 17049-56-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 17049-56-8 HCAPLUS  
 CN 3-Indazolinone, 6-methyl-2-m-tolyl- (8CI) (CA INDEX NAME)



L5 ANSWER 105 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1968:13157 HCAPLUS Full-text  
 DOCUMENT NUMBER: 68:13157  
 ORIGINAL REFERENCE NO.: 68:2535a,2538a  
 TITLE: Organic syntheses by means of Noble metal compounds.  
 XXXIII. Carbonylation of azobenzene-palladium chloride  
 complexes.  
 AUTHOR(S): Takahashi, Hidetaka; Tsuji, Jiro  
 CORPORATE SOURCE: Toyo Rayon Co., Kamakura, Japan  
 SOURCE: Journal of Organometallic Chemistry (1967),  
 10(3), 511-17  
 CODEN: JORCAI; ISSN: 0022-328X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ED Entered STN: 12 May 1984  
 AB PdCl<sub>2</sub> complexes of sym. and asym. substituted azobenzenes were prepared The  
 carbonylation of the complexes in protic solvents affords 2-aryl-3-  
 indazolinones in a high yield. It was found by degradative work of the  
 carbonylated products that when the asym. substituted azobenzene was treated  
 with PdCl<sub>2</sub>, a Pd-C  $\sigma$ -bond is formed preferentially with the benzene ring  
 having an electron-donating group.  
 IT 17049-55-7P 17049-56-8P 17049-57-9P

Serial No.:11/880,002

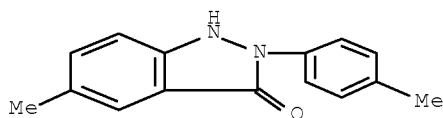
17049-58-0P 17049-59-1P 17049-61-5P

17049-62-6P 17049-63-7P 17049-65-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

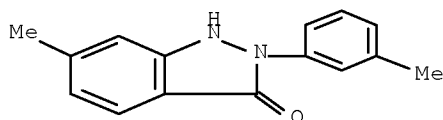
RN 17049-55-7 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-5-methyl-2-(4-methylphenyl)- (CA INDEX NAME)



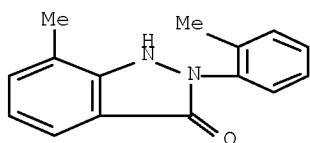
RN 17049-56-8 HCAPLUS

CN 3-Indazolinone, 6-methyl-2-m-tolyl- (8CI) (CA INDEX NAME)



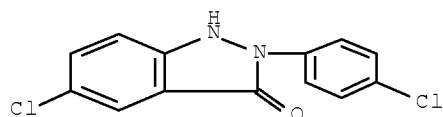
RN 17049-57-9 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-7-methyl-2-o-tolyl- (8CI) (CA INDEX NAME)



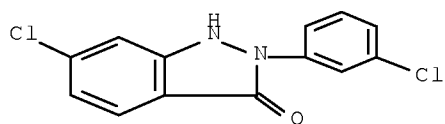
RN 17049-58-0 HCAPLUS

CN 3H-Indazol-3-one, 5-chloro-2-(p-chlorophenyl)-1,2-dihydro- (8CI) (CA INDEX NAME)

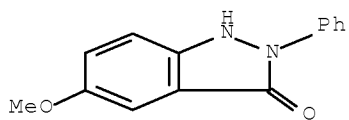


RN 17049-59-1 HCAPLUS

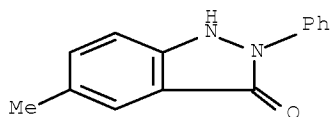
CN 3H-Indazol-3-one, 6-chloro-2-(m-chlorophenyl)-1,2-dihydro- (8CI) (CA INDEX NAME)



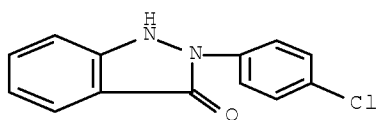
RN 17049-61-5 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-5-methoxy-2-phenyl- (CA INDEX NAME)



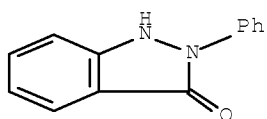
RN 17049-62-6 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-5-methyl-2-phenyl- (CA INDEX NAME)



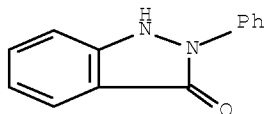
RN 17049-63-7 HCAPLUS  
CN 3H-Indazol-3-one, 2-(4-chlorophenyl)-1,2-dihydro- (CA INDEX NAME)



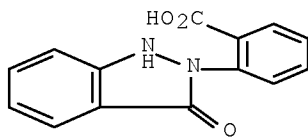
RN 17049-65-9 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 106 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1967:508037 HCAPLUS Full-text  
 DOCUMENT NUMBER: 67:108037  
 ORIGINAL REFERENCE NO.: 67:20335a,20338a  
 TITLE: Relation of bisanthranil to its structural isomer and related compounds  
 AUTHOR(S): Gibson, Geoffrey K. J.; Lindsey, A. S.; Paisley, Henry M.  
 CORPORATE SOURCE: Natl. Phys. Lab., Teddington, UK  
 SOURCE: Journal of the Chemical Society [Section] C: Organic (1967), (19), 1792-5  
 CODEN: JSOOAX; ISSN: 0022-4952  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 ED Entered STN: 12 May 1984  
 GI For diagram(s), see printed CA Issue.  
 AB A spectroscopic, mass spectroscopic, and chemical examination of bisanthranil (I or Ia), m. 185°, and of its structural isomer (II), m. 302°, confirmed the lactone structure of (I or Ia) and the amide structure of II. The spectra were compared with those of 2-phenylindazol-3-one, 2-(2-carboxyphenyl)indazol-3-one, 2-phenyl-3,1-benzoxazin-4-one, isatoic anhydride, and dianthranilide. 26 references.  
 IT 17049-65-9 18428-91-6  
 RL: PRP (Properties)  
 (mass spectrum of)  
 RN 17049-65-9 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)

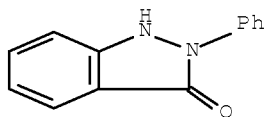


RN 18428-91-6 HCAPLUS  
 CN Benzoic acid, 2-(1,3-dihydro-3-oxo-2H-indazol-2-yl)- (CA INDEX NAME)



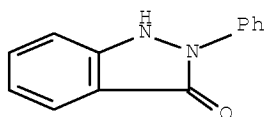
L5 ANSWER 107 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1963:447746 HCAPLUS Full-text  
 DOCUMENT NUMBER: 59:47746  
 ORIGINAL REFERENCE NO.: 59:8565d-f  
 TITLE: Infrared spectroscopy and the structure of indazolone and some of its derivatives

AUTHOR(S): Janssen, R.  
 CORPORATE SOURCE: Serv. Rech. Chem., S.A. Photo-Prods. Gevaert, Mortsel, Belg.  
 SOURCE: Proc. Intern. Meeting Mol. Spectry., 4th, Bologna, 1959 (1962), 2, 820-81  
 DOCUMENT TYPE: Journal  
 LANGUAGE: French  
 ED Entered STN: 22 Apr 2001  
 GI For diagram(s), see printed CA Issue.  
 AB Infrared spectra lead to the following conclusions. Indazolone exists in the solid state (KBr discs) essentially in the lactim form I (R1 = R2 = H), with considerable intermol. H-bonding and a small contribution from the lactam form II (R1 = R2 = H); the solution state was not studied. Solid 1-substituted indazolones have structure I (R2 = H), with extremely strong intermol. H-bonding. When dissolved in polar solvents, CHCl3, or MeCHOH, but not CCl4, they partly tautomerize to form II (R2 = H). In the solid state or when dissolved in CCl4, 2-substituted derivs. exist in form II (R1 = H), never as III (R1 = H). Disubstituted derivs. prepared from 1-substituted indazolones by further substitution have the 1:3 structure I. However, the product obtained from o-C6H4(CO2H)(CHNHBz) and Ac2O has the 1:2 structure II (R1 = Ac, R2 = Bz) although the two possible 1:3 isomers of type I are known. Facile irreversible transformation of 2-substituted indazolones into their 1-isomers, and of 1-acetyl-2-benzoylindazolone to the 2:1 isomer, occurs on heating below the m.p.  
 IT 17049-65-9, 3-Indazolinone, 2-phenyl-  
 (spectrum and structure of)  
 RN 17049-65-9 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 108 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1963:426025 HCAPLUS Full-text  
 DOCUMENT NUMBER: 59:26025  
 ORIGINAL REFERENCE NO.: 59:4688d-e  
 TITLE: Structure of 3-indazolone  
 AUTHOR(S): Serfas, O.; Geppert, G.  
 CORPORATE SOURCE: Deut. Akad. Wiss., Leipzig, Germany  
 SOURCE: Monatsberichte der Deutschen Akademie der Wissenschaften zu Berlin (1962), 4, 125-32  
 CODEN: MDAWAH; ISSN: 0011-9814  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 ED Entered STN: 22 Apr 2001  
 AB The ultraviolet spectra of 3-indazolone (I) and its derivs. at different pH support the existence of tautomerism in I. Spectra (MeOH) of the following are recorded and discussed: I, 1-methyl-, 1-ethyl-, 2-phenyl-, and 1-benzoyl-2-phenyl-3-indazolone, 1-benzoylhydrazine, and 1-benzoyl-2-methylhydrazine.  
 IT 17049-65-9, 3-Indazolinone, 2-phenyl-  
 (spectrum of)  
 RN 17049-65-9 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)





L5 ANSWER 109 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:27244 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 58:27244

ORIGINAL REFERENCE NO.: 58:4539e-g

TITLE: 3-Oxo-2-phenyl-4,5,6,7-tetrahydroindazolecarboxylic acids. I. Synthesis and properties

AUTHOR(S): Skaric, D.; Skaric, V.; Turjak-Zebic, , V.; Veksli, Z.

CORPORATE SOURCE: Inst. Ruder Boskovic, Zagreb, Yugoslavia

SOURCE: Croatica Chemica Acta (1962), 34, 75-83

CODEN: CCACAA; ISSN: 0011-1643

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 58:27244

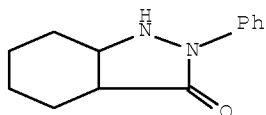
ED Entered STN: 22 Apr 2001

AB A mixture of 1.18 g. triethyl cyclohexanone-2,4,4-tricarboxylate and 0.42 g. PhNHNH2 in 18 ml. 50% EtOH refluxed 6 hrs., then refrigerated gave 78% crystalline monohydrate of diethyl 3-oxo-2-phenyl-4,5,6,7-tetrahydroindazole-5,5-dicarboxylate (I), m. 76° (EtOH). Similarly, 62% ethyl 3-oxo-2-phenyl-4,5,6,7-tetrahydroindazole-5-carboxylate (II) was prepared from 0.97 g. diethyl cyclohexanone-2,4-dicarboxylate and 0.44 g. PhNHNH2, m. 169°. The hydrolysis of I with 20% MeOH-KOH or with 10% HCl yielded 90% 3-oxo-2-phenyl-4,5,6,7-tetrahydroindazole-5,5-dicarboxylic acid (III) as monohydrate. This compound refluxed in glacial HOAC gave anhydrous III. Hydrolysis of II yielded 80-6% monoacid IV, which was also obtained by decarboxylation of III. The content of water of crystallization in monohydrate III was determined by proton magnetic resonance. Second moment corresponds to  $13.5 \pm 1.0$  gauss<sup>2</sup> for hydrate and  $10.5 \pm 1.2$  gauss<sup>2</sup> for anhydrous form that is in agreement with calculated values. Potentiometric titration gave the number of acidic groups of acids III and IV and corresponding esters I and II, and proved the existence of an enol form of these compds. The ultraviolet and infrared absorption spectra were recorded.

IT 70972-70-2, 3H-Indazol-3-one, 1,3a,4,5,6,7-hexahydro-2-phenyl- (carboxy derivs.)

RN 70972-70-2 HCAPLUS

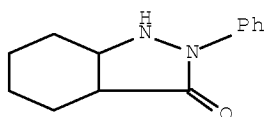
CN 3H-Indazol-3-one, octahydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 110 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:27243 HCAPLUS [Full-text](#)

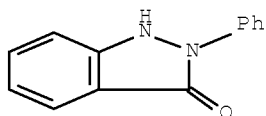
DOCUMENT NUMBER: 58:27243  
 ORIGINAL REFERENCE NO.: 58:4539d-e  
 TITLE: Synthesis of heterocyclic compounds. LXXIII. Synthesis of 2-methyl-9,10-dimethoxy-1,2,3,4,6,7-hexahydro-11bH-benzo-[a]quinolizine  
 AUTHOR(S): Iida, Hideo  
 CORPORATE SOURCE: Tokyo Coll. Pharm., Sendai  
 SOURCE: Yakugaku Zasshi (1962), 82, 956-9  
 CODEN: YKKZAJ; ISSN: 0031-6903  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 ED Entered STN: 22 Apr 2001  
 AB Treatment of 1.7 g. homovera-trylamine with 1.2 g.  $\beta$ -methylglutaric anhydride gave 1.5 g. N-(3,4-dimethoxyphenethyl)- $\beta$ -methylglutaric acid monoamide (I), 113.5-14° (AcOEt). To a mixture of 13 g. I and 80 cc. Ac2O was added a few drops C5H5N and the mixture refluxed 1 hr. to give 7.8 g. N-(3,4-dimethoxyphenethyl)- $\beta$ -methylglutaric imide (II), m. 116.5-18° (EtOH). Electrolytic reduction of 5 g. II gave 2.4 g. 1-(3,4-dimethoxyphenethyl)-4-methyl-2-piperidone (III), b0.2-0.25 183-200°. III (3 g.) was refluxed with 20 cc. POCl3 in 30 cc. PhMe at 130-140° 1 hr. and 3 vols. ligroine was added to give 1 g. sirupy 2-methyl-9,10-dimethoxy-1,2,3,4,6,7-hexahydro-benzo[a]quinolizinium salt (IV). Reduction of 1 g. IV with 2 g. NaBH4 gave 0.5 g. 2-methyl-9,10-dimethoxy-1,2,3,4,6,7-hexahydro-11bH-benzo[a]quinolizine (V); methiodide m. 251-2° (decomposition). Catalytic reduction of IV gave an isomer of V; methiodide m. 233-4° (decomposition).  
 IT 70972-70-2, 3H-Indazol-3-one, 1,3a,4,5,6,7-hexahydro-2-phenyl- (carboxy derivs.)  
 RN 70972-70-2 HCAPLUS  
 CN 3H-Indazol-3-one, octahydro-2-phenyl- (CA INDEX NAME)



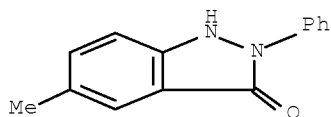
L5 ANSWER 111 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1961:27912 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 55:27912  
 ORIGINAL REFERENCE NO.: 55:5510d-h  
 TITLE: The reactions of carbon monoxide under high pressure. V. Reaction of carbon monoxide and azobenzene derivatives. 2  
 AUTHOR(S): Horie, Shigeki  
 CORPORATE SOURCE: Osaka Univ., Sakai  
 SOURCE: Nippon Kagaku Zasshi (1959), 80, 1038-40  
 CODEN: NPKZAZ; ISSN: 0369-5387  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 ED Entered STN: 22 Apr 2001  
 AB cf. CA 54, 5558d. PhN:NPh (I) (5 g.), 0.05 millimole/cc. [Co(CO)4]2 (II), C6H6, and 150 atmospheric CO heated 2 hrs. at 180-90° in an autoclave gave 2.8 g. 2-phenylindazolone. Similarly, p-MeC6H4N:NPh (III), p-ClC6H4N:NPh (IV), and p-Me2NC6H4N:NPh (V) gave 35.2% 2-phenyl-5-methyl-, 23.8% 2-phenyl-5-chloro-, and 80.0% 2-phenyl-5-dimethylaminoindazolone, resp. Under similar

conditions, except for heating 3 hrs. at 220-30°, I, II, IV, V, o-MeC<sub>6</sub>H<sub>4</sub>N:NPh, p-MeC<sub>6</sub>H<sub>4</sub>N:NC<sub>6</sub>H<sub>4</sub>-p, p-ClC<sub>6</sub>H<sub>4</sub>N:NC<sub>6</sub>H<sub>4</sub>Cl-p, and p-MeOC<sub>6</sub>H<sub>4</sub>N:NC<sub>6</sub>H<sub>4</sub>OMe-p gave 64.6% 3-phenyl-, 35.9% 3-phenyl-6-methyl-, 42.8% 3-phenyl-6-chloro-, 18.0% 3-phenyl-6-dimethylamino-, 26.4% 3-phenyl-8-methyl-, 40.0% 3-(p-tolyl)-6-methyl-, 16.7% 3-(p-chlorophenyl)-6-chloro-, and 27.7% 3-(p-methoxyphenyl)-6-methoxy-1,2,3,4-tetrahydroquinazoline-1,3-diones, resp. p-NCC<sub>6</sub>H<sub>4</sub>N:NPh,  $\alpha$ -C<sub>10</sub>H<sub>7</sub>N:NC<sub>10</sub>H<sub>7</sub>- $\alpha$ , and  $\beta$ -C<sub>10</sub>H<sub>7</sub>N:NC<sub>10</sub>H<sub>7</sub> failed to give quinazoline derivs. The structures of the quinazoline derivs. were determined by hydrolysis with NaOH to give the corresponding amine and anthranilic acid derivs. It was pointed out that ring closure occurred with the benzene ring carrying electron-donating substituents.  $\alpha$ -Styrylpyridine (3 g.), 1 g. II, 20 cc. C<sub>6</sub>H<sub>6</sub>, and 130 atmospheric CO heated 1 hr. at 135-45° gave 0.57 g. reddish purple, amorphous solid, m. 200-50°, which contained 8.7% O. The reaction did not occur at 100° and gave resin at 200°.  $\alpha$ -Styrylquinoline was similarly treated, but no reaction occurred at 140° and resinification occurred at 200-30°.

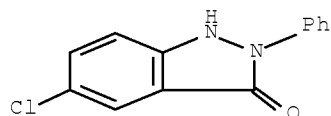
IT 17049-65-9, 3-Indazolinone, 2-phenyl-  
(and derivs.)  
RN 17049-65-9 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



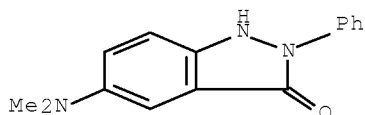
IT 17049-62-6P, 3-Indazolinone, 5-methyl-2-phenyl-  
28561-70-8P, 3-Indazolinone, 5-chloro-2-phenyl-  
101091-21-8P, 3-Indazolinone, 5-dimethylamino-2-phenyl-  
RL: PREP (Preparation)  
(preparation of)  
RN 17049-62-6 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-5-methyl-2-phenyl- (CA INDEX NAME)



RN 28561-70-8 HCAPLUS  
CN 3-Indazolinone, 5-chloro-2-phenyl- (6CI, 8CI) (CA INDEX NAME)



RN 101091-21-8 HCAPLUS  
 CN 3-Indazolinone, 5-dimethylamino-2-phenyl- (6CI) (CA INDEX NAME)



L5 ANSWER 112 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1961:8231 HCAPLUS  
 DOCUMENT NUMBER: 55:8231  
 ORIGINAL REFERENCE NO.: 55:1668b-c  
 TITLE: Pyrazines  
 INVENTOR(S): Tarailo, Stanley D.  
 PATENT ASSIGNEE(S): Wyandotte Chemicals Corp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2945858		19600719	US	<--
DE 1135912			DE	
GB 912765			GB	

ED Entered STN: 22 Apr 2001

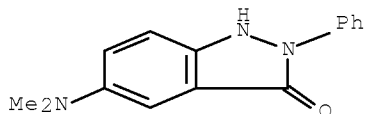
AB The use of greater than atmospheric pressures for the vapor phase, copper chromite catalyzed dehydrogenation of piperazine compds. to the corresponding pyrazines (I) is described. The weight of I produced/unit weight of catalyst/unit time is increased as the pressure increases up to about 65 lb./sq. in. gage.

IT 101091-21-8

(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 101091-21-8 HCAPLUS

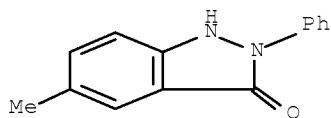
CN 3-Indazolinone, 5-dimethylamino-2-phenyl- (6CI) (CA INDEX NAME)



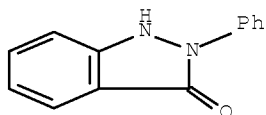
L5 ANSWER 113 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1961:8230 HCAPLUS  
 DOCUMENT NUMBER: 55:8230  
 ORIGINAL REFERENCE NO.: 55:1667i,1668a-b  
 TITLE: Quinazoline and indazolone derivatives  
 INVENTOR(S): Murahashi, Shunsuke; Horie, Shigeki  
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd.  
 DOCUMENT TYPE: Patent

LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

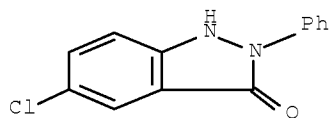
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	US 2944056		19600705	US 1957-660773	19570522 <--
ED	Entered STN: 22 Apr 2001				
AB	Substituted azobenzenes in the presence of CO and a Co or Fe catalyst under high pressure below 200° were converted to indazolones (I). When the temperature exceeded 200° the quinazoline (II) compds. were obtained. Thus, 5 g. azobenzene, 1 g. cobalt carbonyl, and 50 ml. C <sub>6</sub> H <sub>6</sub> was autoclaved at 150 atmospheric, shaken at 170-80° 2 hrs., the insol. product filtered off, treated with 2-3% NaOH solution, filtered, the filtrate acidified, and the product recrystd. from EtOH to yield 49.1% 2-Ph derivative of I, m. 204°. Similarly were prepared the following substituted I (substituents, m.p., and % yield given): 2-phenyl-5-methyl, 252°, 35.2; 2-phenyl-5-chloro, 233°, 23.8; 2-phenyl-5-(dimethylamino), 217°, 80. When the reaction temperature was 230° (3 hrs.), the following substituted 2,4-dioxo-1,2,3,4-tetrahydro derivs. of II were obtained (substituent, m.p., and % yield given): 3-Ph, 273-5°, 64.6; 3-phenyl-6-methyl, 295-6°, 35.9; 3-phenyl-6-(dimethylamino), 281°, 18; 3-(p-chlorophenyl)-6-chloro, 325°, 16.7; 3-(p-methoxyphenyl)-6-methoxy, 279°, 27.7; 3-(p-tolyl)-6-methyl, 285°, 40; 3-phenyl-6-chloro, --, 36.3.				
IT	17049-62-6P, 3-Indazolinone, 5-methyl-2-phenyl- 17049-65-9P, 3-Indazolinone, 2-phenyl- 28561-70-8P, 3-Indazolinone, 5-chloro-2-phenyl- 101091-21-8P, 3-Indazolinone, 5-dimethylamino-2-phenyl- RL: PREP (Preparation) (preparation of)				
RN	17049-62-6 HCAPLUS				
CN	3H-Indazol-3-one, 1,2-dihydro-5-methyl-2-phenyl- (CA INDEX NAME)				



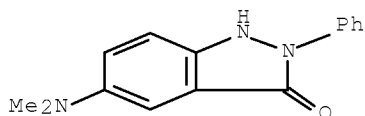
RN 17049-65-9 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



RN 28561-70-8 HCAPLUS  
 CN 3-Indazolinone, 5-chloro-2-phenyl- (6CI, 8CI) (CA INDEX NAME)



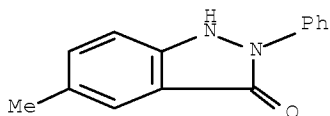
RN 101091-21-8 HCAPLUS  
 CN 3-Indazolinone, 5-dimethylamino-2-phenyl- (6CI) (CA INDEX NAME)



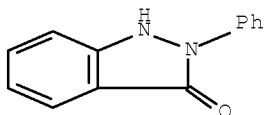
L5 ANSWER 114 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1960:129087 HCAPLUS Full-text  
 DOCUMENT NUMBER: 54:129087  
 ORIGINAL REFERENCE NO.: 54:24786h-i, 24787a-e  
 TITLE: High pressure reaction of carbon monoxide. III.  
 Reaction between azo compounds and carbon monoxide  
 AUTHOR(S): Horie, Shigeki; Murahashi, Shunsuke  
 CORPORATE SOURCE: Osaka Univ., Nakanoshima, Osaka  
 SOURCE: Bulletin of the Chemical Society of Japan ( 1960), 33, 88-94  
 CODEN: BCSJA8; ISSN: 0009-2673  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 OTHER SOURCE(S): CASREACT 54:129087  
 ED Entered STN: 22 Apr 2001  
 AB cf. preceding abstract 3-Phenyl-2,4-dioxo-1,2,3,4-tetrahydroquinazoline (I) was obtained by treating a mixture of 5.0 g. azobenzene (II), 2.0 g. [Co(CO)<sub>4</sub>]<sub>2</sub>, and 45 ml. C<sub>6</sub>H<sub>6</sub> with CO at 150 atmospheric 0.5 hr. at 220-30°. After cooling, 5.2 g. crystalline mass was filtered off, the filtrate refluxed on a water bath to decompose the catalyst, and the precipitate filtered off. The C<sub>6</sub>H<sub>6</sub> solution gave 0.1 g. lactone of 2-(3-hydroxyindazol-2-yl)benzoic acid (III). By treating the crystalline mass with a cold 5% NaOH solution was obtained 12.1% insol. residue of diphenylurea (IV). Acidification of the alkaline solution (pH 4.0) gave 69.2% I, m. 275° (alc.). Similarly, the following derivs. of I were prepared from R'N:NR in 3 hrs. with 0.05 mmole/cc. [Co(CO)<sub>4</sub>]<sub>2</sub> (R', R, % yield, and m.p. given): p-MeC<sub>6</sub>H<sub>4</sub>, Ph, 35.9, 296°; p-ClC<sub>6</sub>H<sub>4</sub>, Ph, 42.8, 292°; p-Me<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, Ph, 18.0, 231°; m-MeC<sub>6</sub>H<sub>4</sub>, Ph, 26.4, 256°; p-NCC<sub>6</sub>H<sub>4</sub>, Ph, trace, -; p-MeC<sub>6</sub>H<sub>4</sub>, p-MeC<sub>6</sub>H<sub>4</sub>, 40.0, 285°; p-ClC<sub>6</sub>H<sub>4</sub>, p-ClC<sub>6</sub>H<sub>4</sub>, 16.7, 325°; p-MeOC<sub>6</sub>H<sub>4</sub>, p-MeOC<sub>6</sub>H<sub>4</sub>, 27.7, 279°. In a similar manner, various catalysts and solvents were used to prepare I from II (catalyst, g., solvent (50 ml. used), initial pressure in atmospheric, temperature, time in hrs., % yield of I, % yield of IV given): Ni(CO)<sub>4</sub>, 3, C<sub>6</sub>H<sub>6</sub>, 150, 230, 3, 0, 0; Fe(CO)<sub>5</sub>, 3, C<sub>6</sub>H<sub>6</sub>, 180, 240, 4, 12.3, 1.7; [Co(CO)<sub>4</sub>]<sub>2</sub>, 2, C<sub>6</sub>H<sub>6</sub>, 150, 230, 0.5, 69.2, 12.1; Co(II) stearate, 2, C<sub>6</sub>H<sub>6</sub>, 160, 230, 2.5, 29.2, 24.2; Co(II) acetylacetonate, 1, C<sub>6</sub>H<sub>6</sub>, 150, 240, 2, 23.1, 13.8; [Co(CO)<sub>4</sub>]<sub>2</sub>, 1, EtOH, 150, 230, 3, 0, 0; [Co(CO)<sub>4</sub>]<sub>2</sub>, 1, H<sub>2</sub>O, 160, 230, 3, 0, 0; [Co(CO)<sub>4</sub>]<sub>2</sub>, 1, C<sub>6</sub>H<sub>6</sub>, 150, 190, 4, 17.5, 16.0; [Co(CO)<sub>4</sub>]<sub>2</sub>, 1, C<sub>6</sub>H<sub>6</sub>, 100, 230, 3, 46.1, 8.6. Also, various derivs. of V were prepared from RN:NR' with [Co(CO)<sub>4</sub>]<sub>2</sub> (0.05

mmole/cc.) and reaction time 2 hrs. (R, R', % yield, and m.p. given): p-MeC<sub>6</sub>H<sub>4</sub>, Ph, 35.2, 252°; p-ClC<sub>6</sub>H<sub>4</sub>, Ph, 23.8, 233°; p-Me<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, Ph, 80.0, 217°. Similarly, when II was heated with CO below 230°, 2-phenylindazolone, (V) resulted. Also, CO and V gave 81.8% I; however, this reaction was not feasible for compds. as indazole, indazolone, 2-phenylbenzoxazol, and 2-phenylbenzimidazole. I in boiling alc. KOH gave 46.5% o-carboxydiphenylurea (VI), whereas in boiling 10% aqueous NaOH almost quant. yields of anthranilic acid (VII) were obtained. In this manner, derivs. of I, prepared from RC<sub>6</sub>H<sub>4</sub>N:NC<sub>6</sub>H<sub>4</sub>R', were hydrolyzed (R, R', % yield of VII derivative containing R, and m.p. given): H, H, 95.6, 145°; p-Me, H, 88.1, 172°; p-Cl, H, 80.0, 205°; p-OMe, H, 21.8, 178°; p-Me, p-Me, 97.3, 172°; p-Cl, p-Cl, 94.5, 205°; p-OMe, p-OMe, 28.2, 178°. Phenyl isocyanate (VIII) (1.8 g.) in 10 ml. Et<sub>2</sub>O added to 2 g. VII in 10 ml. Et<sub>2</sub>O under ice-cooling gave 90% VI, m. 187-8° (alc.). VIII (1.5 g.) added to 2 g. Et anthranilate, and the mixture heated on a boiling water bath 0.5 hr. gave 94.3% o-carbethoxydiphenylurea (IX), m. 148° (alc.). VI (1.0 g.) heated 0.5 hr. at 190° gave 0.05 g. I, m. 273-5° (alc.). When dry HCl was added to a solution of 1.0 g. VI in 30 ml. alc. at 20°, 96.8% I formed on standing. IX (0.2 g.) heated 3 hrs. at 200° in a sealed glass tube yielded 18.1% I. Heating a solution of 2 g. hydrazobenzene and 1 g. [Co(CO)<sub>4</sub>]<sub>2</sub> in 30 ml. C<sub>6</sub>H<sub>6</sub> at 220-30° 4 hrs. under 120 atmospheric CO gave 41.3% IV and 7.7% I. The reaction of CO and α-styrylpyridine or α-styrylquinoline gave undetermined amorphous products.

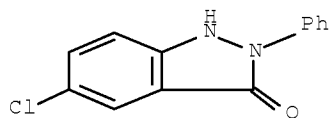
IT 17049-62-6P, 3-Indazolinone, 5-methyl-2-phenyl-  
 17049-65-9P, 3-Indazolinone, 2-phenyl- 28561-70-8P,  
 3-Indazolinone, 5-chloro-2-phenyl- 101091-21-8P, 3-Indazolinone,  
 5-dimethylamino-2-phenyl-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 17049-62-6 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-5-methyl-2-phenyl- (CA INDEX NAME)



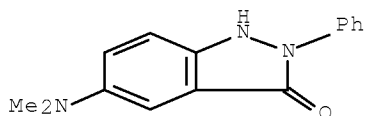
RN 17049-65-9 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



RN 28561-70-8 HCAPLUS  
 CN 3-Indazolinone, 5-chloro-2-phenyl- (6CI, 8CI) (CA INDEX NAME)



RN 101091-21-8 HCAPLUS  
 CN 3-Indazolinone, 5-dimethylamino-2-phenyl- (6CI) (CA INDEX NAME)



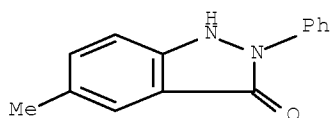
L5 ANSWER 115 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1960:129086 HCAPLUS Full-text  
 DOCUMENT NUMBER: 54:129086  
 ORIGINAL REFERENCE NO.: 54:24785g-i,24786a-h  
 TITLE: Studies on the high pressure reaction of carbon monoxide. I. The reactions of Schiff bases and azo compounds with synthesis gas  
 AUTHOR(S): Murahashi, Shunsuke; Horie, Shigeki  
 CORPORATE SOURCE: Univ. Osaka  
 SOURCE: Ann. Rept. Sci. Works, Fac. Sci., Osaka Univ. (1959), 7, 89-113  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 ED Entered STN: 22 Apr 2001

AB cf. CA 54, 3166d. Anils (RN:CR1R2) were reduced with synthesis gas (1:1 CO-H) at 200 atmospheric to give 78-83% RNHCHR1R2 with C6H6 or 1:1 C6H6-EtOH solvent and 0.03 mmole/ml. Co2(CO)8 at 120-50° 70-130 min. Thus were reduced p-ClC6H4N:CHPh, p-MeC6H4N:CHPh, p-MeOC6H4N:CHPh, and p-O2NC6H4N:CHPh. Under these same conditions, PhNO2, Ph2N2 (I), and (PhNH)2 gave (PhNH)2CO (II) in 5-6, 115-20, and 25-30% yields, resp. p-ClC6H4N2Ph (III) gave a trace of II, 5% p-ClC6H4NHCONHPh, and 3% (p-ClC6H4NH)2CO. p-MeC6H4N2Ph (IV) gave a trace of II, 12% p-MeC6H4NHCONHPh, and 5% (p-MeC6H4NH)2CO. PhN:CHPh reacted with CO at 100-200 atmospheric in solvents such as C6H6 or PhMe at 200-230° in the presence of 0.03 mmole/ml. Co2(CO)8 to form 71.9% 2-phenylphthalimidine (V), m. 164°. Fe(CO)5 and Co compds. capable of forming metal carbonyls also catalyzed this reaction while Ni(CO)4 was ineffective. Polar solvents such as tetrahydrofuran, EtOH, and H2O completely inhibited this reaction. The following derivs. of phthalimidine were prepared from their resp. anils (phthalimidine substituents, % yield, and m.p. given): 2-(p-MeOC6H4), 85.7, 138°; 2-(p-HOC6H4), 64.9, 225°; 2-(p-ClC6H4), 75.0, 182°; 2-Ph, 7-Me2N, 82.1, 154°; 2-Ph, 7-OH, 77.2, 216°; 2-Ph, 4-MeO, 17.8, 146°; 2-Ph, 5-MeO, 5.3, 146°; 2-PhCH2, 82.4, 91°; 2-Me, 48.6, 115°; 2-Ph, 3-Me, 61.4, 82°; 2,3-Ph2, 96.9, 196.5°; 2-Ph, 4,5-CH:CHCH:CH (from 1-C10H7CH:NPh), 96.0, 177°; 2-Ph, 5,6-CH:CHCH:CH (from 2-C10H7CH:NPh), 80.0 (based on anil consumed), 254°. o-HOC6H4CH:NPh did not add CO but formed 6 weight-% Co complex, m. 191°. PhCH:NOH did not add CO but was converted to 26% BzNH, probably by a Beckmann rearrangement. Other anils that also gave no reaction were p-O2NC6H4N:CHPh, PhN:CHC6H4NO2-o, PhN:CHCH2Ph, and PhN:CHCH2CH2Ph. I reacted with CO at 150

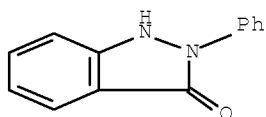


atmospheric in solvents such as C<sub>6</sub>H<sub>6</sub> or PhMe at 170–90° in the presence of 0.05 mmole/ml. Co<sub>2</sub>(CO)<sub>8</sub> to give 49.1% 2-phenylindazolone (VI), m. 204°, 17.5% 3-phenyl-2,4-dioxo-1,2,3,4-tetrahydroquinazoline (VII), m. 275°, and 16% II. When this reaction was carried out at 220–30°, I gave 69.2% VII, 12.1% II, a few % 2-(3-hydroxyindazol-2-yl)benzoic acid lactone, and a small amount unidentified neutral substance, m. 165°. Similarly, VI gave 81.8% VII when treated with CO at 230°, indicating that it was an intermediate in the formation of VII from I. Much lower yields of VII were obtained with Fe(CO)<sub>5</sub>, Co stearate, or Co acetylacetonate instead of Co<sub>2</sub>(CO)<sub>8</sub>. Polar solvents such as EtOH and H<sub>2</sub>O completely inhibited the reaction. Other derivs. of VI prepared by the same method used for VI were (starting azobenzene, VI substituents, % yield, and m.p. given): IV, 5-Me, 35.2, 252°; III, 5-Cl, 23.8, 233°; p-Me<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>N<sub>2</sub>Ph (VIII), 5-Me<sub>2</sub>N, 80.0, 217°. Other derivs. of 2,4-dioxo-1,2,3,4-tetrahydroquinazoline (IX) prepared by the same method as for VII were (starting azobenzene, IX substituents, % yield, and m.p. given): IV, 3-Ph, 6-Me (X), 35.9, 296°; III, 3-Ph, 6-Cl (XI), 42.8, 292°; VIII, 3-Ph, 6-Me<sub>2</sub>N, 18.0, 281°; o-MeC<sub>6</sub>H<sub>4</sub>N:Ph, 3-Ph, 8-Me, 26.4, 256°; (p-MeC<sub>6</sub>H<sub>4</sub>)<sub>2</sub>N<sub>2</sub>, 3-(p-MeC<sub>6</sub>H<sub>4</sub>), 6-Me (XII), 40.0, 285°; (p-ClC<sub>6</sub>H<sub>4</sub>)<sub>2</sub>N<sub>2</sub>, 3-(p-ClC<sub>6</sub>H<sub>4</sub>), 6-Cl (XIII), 16.7, 325°; (p-MeOC<sub>6</sub>H<sub>4</sub>)<sub>2</sub>N<sub>2</sub>, 3-(p-MeOC<sub>6</sub>H<sub>4</sub>), 6-MeO (XIV), 27.7, 279°. No derivs. of IX were formed from p-NCC<sub>6</sub>H<sub>4</sub>N<sub>2</sub>Ph, (1-Cl<sub>10</sub>H<sub>7</sub>)<sub>2</sub>N<sub>2</sub> and (2-Cl<sub>10</sub>H<sub>7</sub>)<sub>2</sub>N<sub>2</sub>. Both 2-(2-phenylvinyl)pyridine and 2-(2-phenylvinyl)quinoline reacted with CO under the conditions used for the preparation of VII to form violet-red unstable solids, which could not be crystallized. Hydrolysis of the derivs. of IX gave in good yields the following derivs. of o-anthranilic acid (derivative of IX hydrolyzed, o-anthranilic acid substituent, % yield, and m.p. given): VII, none, 95.6, 145°; X, 5-Me, 88.1, 172°; XI, 5-Cl, 80.0, 205°; 6-MeO derivative of IX, 5-MeO, 21.8, 178°; XII, 5-Me, 97.3, 172°; XIII, 5-Cl, 94.5, 205°; XIV, 5-MeO, 28.2, 178°. Kinetic data were given for phthalimidine formation from PhN:CM<sub>2</sub>Ph, PhN:CP<sub>2</sub>, PhN:CHPh, o-MeC<sub>6</sub>H<sub>4</sub>N:CM<sub>2</sub>Ph, p-MeC<sub>6</sub>H<sub>4</sub>N:CHPh, o-MeC<sub>6</sub>H<sub>4</sub>N:CHPh, 2,6-Me<sub>2</sub>C<sub>6</sub>H<sub>3</sub>N:CHPh, and 2,6-Et<sub>2</sub>C<sub>6</sub>H<sub>3</sub>N:CHPh. The anils with more o-substituents on R had slower reaction rates and gave lower conversions than the anils with less o-substituents. The p-Me group on R had a promoting effect on the reaction. The size of R<sub>1</sub> (where R<sub>2</sub> = Ph) did not affect the reaction rates appreciably. Thus, it was postulated that the mechanism for the formation of phthalimidines and indazolones involved a complex resulting from the coordination of Co<sub>2</sub>(CO)<sub>8</sub> with the electron pair of the N atom rather than with the π-electrons of the double bond. No steric effect of o-substituents on R was observed for the reduction of PhN:CHPh and 2,6-Et<sub>2</sub>C<sub>6</sub>H<sub>3</sub>N:CHPh with synthesis gas.

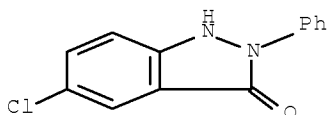
IT 17049-62-6P, 3-Indazolinone, 5-methyl-2-phenyl-  
 17049-65-9P, 3-Indazolinone, 2-phenyl- 28561-70-8P,  
 3-Indazolinone, 5-chloro-2-phenyl- 101091-21-8P, 3-Indazolinone,  
 5-dimethylamino-2-phenyl-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 17049-62-6 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-5-methyl-2-phenyl- (CA INDEX NAME)



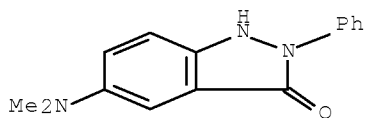
RN 17049-65-9 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



RN 28561-70-8 HCAPLUS  
CN 3-Indazolinone, 5-chloro-2-phenyl- (6CI, 8CI) (CA INDEX NAME)



RN 101091-21-8 HCAPLUS  
CN 3-Indazolinone, 5-dimethylamino-2-phenyl- (6CI) (CA INDEX NAME)



L5 ANSWER 116 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 1960:39103 HCAPLUS Full-text  
DOCUMENT NUMBER: 54:39103  
ORIGINAL REFERENCE NO.: 54:7715a-i, 7716a-b  
TITLE: Reaction of 4-hydroxycinnoline-3-carboxylic acid with  
pyridine and acetic anhydride  
AUTHOR(S): Morley, J. S.  
CORPORATE SOURCE: Imp. Chem. Inds. Ltd., Macclesfield, UK  
SOURCE: Journal of the Chemical Society (1959)  
2280-6  
CODEN: JCSOA9; ISSN: 0368-1769

DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
OTHER SOURCE(S): CASREACT 54:39103

ED Entered STN: 22 Apr 2001

GI For diagram(s), see printed CA Issue.

AB The constitution of the product formed by warming together the title reactants was shown to be I (R' = H) (cf. Schofield and Simpson, C.A. 41, 968f). Synthesis of a number of intermediate or related products for this proof were described. 6-Chloro-4-hydroxycinnoline-3-carboxylic acid (10 g.), 45 ml. C5H5N, and 65 ml. Ac2O heated on a steam bath 1 hr. gave 13.8 g. olive-green crystals of I (R' = Cl), which washed with dry Et2O, and dried at 80° in vacuo decomposed above 240°. A suspension of 13.8 g. I (R' = Cl) in 800 ml. 2N HCl refluxed 5 hrs., cooled, neutralized to pH 6-7 with solid Na2CO3, stirred 1

hr. at room temperature, and the solid washed with H<sub>2</sub>O gave 8.0 g. II (R' = Cl), dried at 80° m. 162-3° (EtOH); air-dried hydrate m. 132-3°. Aqueous KMnO<sub>4</sub> (450 ml., 2%) added during 1 hr. to a vigorously stirred suspension of 3 g. II (R' = Cl) in 200 ml. H<sub>2</sub>O at 40-5°, the mixture stirred a further 0.5 hr. at 40-5°, excess KMnO<sub>4</sub> removed with EtOH, and the filtrate acidified to pH 3.8-4.2 with HCl gave 2.3 g. 2-(2-carboxy-4-chlorophenylazo)pyridine, orange-red needles, m. 192-3° (aqueous EtOH). o-ONC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H (15.9 g.), 9.4 g. 2-aminopyridine, and 94 ml. 50% aqueous NaOH vigorously stirred at 85-90° 5 hrs., 125 ml. H<sub>2</sub>O added, stirred a further 0.25 hr. at 80-5°, cooled, filtered, the solid dissolved in 250 ml. warm H<sub>2</sub>O, and the warm filtrate acidified with AcOH yielded 11.45 g. 2-(o-carboxyphenylazo)pyridine, orange-red prisms, m. 144-5° (EtAcO); picrate m. 173-4°. Acidification of the alkaline mother liquors gave 0.84 g. azoxybenzene-2,2'-dicarboxylic acid, pale yellow prisms, m. 253-5° (decomposition) (EtOAc and EtOH). A stirred suspension of 57 g. 5-chloroanthranilic acid, 300 ml. H<sub>2</sub>O, and 340 ml. concentrated HCl diazotized at 0-3° with 21.6 g. NaNO<sub>3</sub> in 200 ml. H<sub>2</sub>O, added in 30 min. to 2400 ml. H<sub>2</sub>O saturated with SO<sub>2</sub> at 0-5°, during the addition SO<sub>2</sub> bubbled through the mixture and the temperature kept at 5-10°, left at room temperature overnight, filtered, and 3 l. concentrated HCl added to the ice-cooled filtrate gave the hydrochloride, m. 197° (decomposition), which stirred with aqueous NaAcO yielded 25 g. 5-chloro-2-hydrazinobenzoic acid (III), needles, m. 265° (decomposition) (aqueous EtOCH<sub>2</sub>CH<sub>2</sub>OH); benzylidene derivative, needles, m. 249-50° (decomposition) (EtOH). III (2 g.) (recrystd.), 200 ml. H<sub>2</sub>O, and 5 ml. concentrated HCl refluxed 1 hr. gave 1.8 g. 5-chloroindazolone, needles, m. 273-5° (decomposition) (AcOH). III (9.15 g.) (crude), 5 g. 2-chloropyridine, and 40 ml. EtOH heated at 170-80° 5 hrs. yielded 0.9 g. crystals on cooling (mother liquor A), which dissolved in 25 ml. boiling H<sub>2</sub>O containing sufficient NaOH to give alkalinity to Clayton yellow paper and the hot solution acidified with AcOH gave 0.32 g. 5-chloro-2-(2-pyridyl)-3-indazolone (IV), pale yellow prisms, m. 251-2° (AeOH), v 3120, 1660 cm.<sup>-1</sup> (Nujol), λ 254, 292, 298, 3405 mμ (log ε 4.17, 4.15, 4.14, 3.61, MeOH). Mother liquor A treated with 60 ml. H<sub>2</sub>O gave 1.1 g. 5-chloro-1-(2-pyridyl)-3-indazolone, pale fawn needles, m. 251-2° (AcOH, EtOH), v 2500-2700, 1600 cm.<sup>-1</sup> (Nujol), λ 260, 337 mμ (log ε 4.32, 4.14, MeOH). The infrared and ultraviolet data indicated that the 1-isomer existed mainly in the enol form and 2-isomer, IV, in the keto form. IV (0.1 g.) in hot 5 ml. 0.5N KOH cooled rapidly to 50° and shaken with 0.06 ml. Me<sub>2</sub>SO<sub>4</sub> 10 min. at 45-50° and extracted with Et<sub>2</sub>O gave 5-chloro-1,3-dihydro-1-methyl-3-oxo-2-(2-pyridyl)indazole, m. 1234° (aqueous MeOH). 2-(o-Carboxyphenylazo)pyridine (V) (2.27 g.) in 100 ml. EtOH shaken with H at room temperature and pressure in the presence of PdO absorbed 1 mole H in 1 hr.; the solid separated, digested with 30 ml. cold 0.5N NaOH, and the filtrate acidified with AcOH gave 2.05 g. 2-(o-carboxyphenylhydrazino)pyridine (VI), needles, m. 232° (decomposition) (EtOCH<sub>2</sub>CH<sub>2</sub>OH); HCl salt (VII) m. 243-4° (MeOH-Et<sub>2</sub>O). The same product was obtained by treating 2.27 g. V in 25 ml. CHCl<sub>3</sub> dropwise with 1.13 ml. PhSH at 20-2°, setting aside at room temperature 2 days, and working up. Prepared by the same methods was 2-(2-carboxy-4-chlorophenylhydrazino)pyridine, needles, m. 252-3° (decomposition) (EtOCH<sub>2</sub>CH<sub>2</sub>OH). VII (2 g.) and 20 ml. EtOH heated at 170-80° 5 hrs. yielded 0.75 g. 2-(2-pyridyl)-3-indazolone, m. 185-6°. Infrared analysis indicated that the compound existed mainly in the enol form. o-Hydrazinobenzoic acid (7.4 g.), 5 g. 2-chloropyridine, and 40 ml. EtOH heated at 170-80° 5 hrs., cooled, and treated with 80 ml. H<sub>2</sub>O gave 1.21 g. 1-(2-pyridyl)-3-indazolone, pale yellow needles, m. 204-5° (MeOH), v 2500, 2700, 1660 cm.<sup>-1</sup> (Nujol), λ 255 (log ε 4.32, 4.25, MeOH).

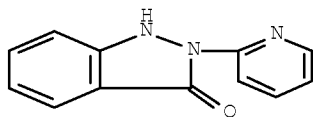
IT 74152-92-4P, 3-Indazolinone, 2-(2-pyridyl)- 104093-46-1P  
 , 3-Indazolinone, 5-chloro-2-(2-pyridyl)-

RL: PREP (Preparation)

(preparation of)

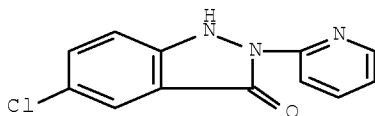
RN 74152-92-4 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-(2-pyridinyl)- (CA INDEX NAME)



RN 104093-46-1 HCAPLUS

CN 3-Indazolinone, 5-chloro-2-(2-pyridyl)- (6CI) (CA INDEX NAME)



L5 ANSWER 117 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1960:34231 HCAPLUS Full-text

DOCUMENT NUMBER: 54:34231

ORIGINAL REFERENCE NO.: 54:6700d-i,6701a

TITLE: Some cobalamin analogs of the benzimidazole series

AUTHOR(S): Boretti, Giulia; Cattapan, Domenico; Minghetti,

Anacleto; Reggiani, Mario; Valcavi, Umberto;

Valentini, Luigi

CORPORATE SOURCE: Lab. ricerche farm., Milan

SOURCE: Chemische Berichte (1959), 92, 3023-30

CODEN: CHBEAM; ISSN: 0009-2940

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

ED Entered STN: 22 Apr 2001

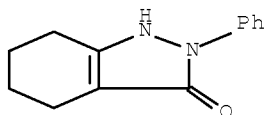
AB Analogs of vitamin B12 are formed by culturing *Nocardia rugosa* in the presence of 4,5,1,2-EtPrC6H2(NH2)2 (I), 6,7-diamino derivative of Tetralin (II), and 2,4,5-(H2N)3C6H2Me (III). I (3 g.) and 10 cc. 95% HCO2H refluxed and evaporated in vacuo at 60° to near dryness, the residue dissolved in 10 cc. H2O, adjusted with 10% aqueous NaOH to pH 8, and extracted with three 30-cc. portions EtOAc, and the extract worked up gave 1.4 g. 4,5,1,2-EtPrC6H2(NHOCH)2 (IV), m. 123-5° (EtOH). IV (200 mg.), 6 cc. 10% aqueous NaOH, and 10 cc. MeOH refluxed 10 min., the MeOH evaporated, the residue diluted with 50 cc. H2O and filtered, and the residue washed with H2O and dried at 50° gave 170 mg. 5(6)-ethyl-6(5)-propylbenzimidazole (V), m. 108-9° (C6H6-petr. ether). II (3 g.) and 9 cc. 99% HCO2H heated 2 hrs. on the water bath, cooled, basified weakly with 10% aqueous NaOH, and extracted with EtOAc yielded 1.8 g. 5,6-tetramethylenebenzimidazole (VI), m. 139-41° (C6H6). III.3HCl (1 g.), 1 g. NaOAc, and 10 cc. 88% HCO2H refluxed 2 hrs., kept at room temperature overnight, diluted with 10 cc. H2O, adjusted with 10% aqueous NaOH to pH 9-10, concentrated in vacuo, and filtered gave 650 mg. 5(6)-HCONH analog (VII) of III, m. 203-5° (decomposition) (H2O). VII (500 mg.) and 10 cc. 10% HCl heated 0.5 hr. on the steam bath and evaporated in vacuo yielded 220 mg. 5(6)-amino-6(5)-methylbenzimidazole (VIII).2HCl, m. 280-5° (decomposition) (concentrated HCl). The appropriate cobalamin analog (about 2 mg.) in 0.5 cc. 6N HCl was heated 20 hrs. at 150° in a sealed tube, diluted with 9 vols. H2O, washed with

BuOH, and concentrated, and the resulting product identified by paper chromatography and ultra-violet spectroscopy. The analog from I gave V, Rf 0.77 (4:1:5 BuOH-AcOH-H<sub>2</sub>O) (authentic V, Rf 0.80. The analog from II gave VI, Rf 0.77 (authentic VI, Rf 0.79). The analog from III gave VIII, Rf 0.30 (authentic VIII, Rf 0.30); 5,6-dimethylbenzimidazole, Rf 0.74. The partition coeffs. in the systems 23 g. (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> in 100 cc. H<sub>2</sub>O-BuOH and 14 g. (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> in 100 cc. H<sub>2</sub>O-BuOH and the R<sub>v</sub> vitamin B<sub>12</sub> values with 100:1:50:0.25 EtMeCHOH-AcOH-H<sub>2</sub>O-5% aqueous KCN were determined for the following compds.: vitamin B<sub>12</sub>, 0.86, 0.16, 1; analog from I, -, 1.52, 1.8; analog from II, 1.40, 0.35, 1.2; analog from III, 0.10, -, 0.45; 2nd analog from III, 0.13, -, 0.45. During paper electrophoresis at pH 2.7, B<sub>12</sub> and the analogs from I and II were neutral, those from III were electropos. The ultraviolet and infrared absorption spectra of vitamin B<sub>12</sub> and of the analogs are recorded.

IT 62221-94-7, 3-Indazolinone, 4,5,6,7-tetrahydro-2-phenyl-  
(spectrum of)

RN 62221-94-7 HCAPLUS

CN 3H-Indazol-3-one, 1,2,4,5,6,7-hexahydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 118 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1960:34230 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 54:34230

ORIGINAL REFERENCE NO.: 54:6699h-i,6700a-d

TITLE: Heterocycles. IX. Resonance effects in  
pyrazolin-5-ones and related compounds

AUTHOR(S): DeStevens, George; Halamandaris, Angela; Wenk,  
Patricia; Dorfman, Louis

CORPORATE SOURCE: Ciba Pharm. Products, Inc., Summit, NJ

SOURCE: Journal of the American Chemical Society (1959  
, 81, 6292-5

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 54:34230

ED Entered STN: 22 Apr 2001

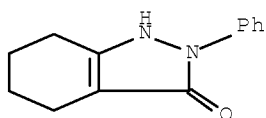
AB cf. C.A. 54, 1528g. The spectral properties of tetrahydroindazolone, structurally related to pyrazolin-5-one, suggested that this type of compound existed predominantly in the dipolar zwitterion form; the predominance of this structure was demonstrated by several chemical reactions. 2-Hydrazino-3-methyl-5,6,7,8-tetrahydroquinazolin-4-one (6 g.) and 15 cc. N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O in 25 cc. EtOH refluxed 4 hrs., cooled, and acidified with glacial AcOH gave 1.2 g. 4,5,6,7-tetrahydro-3(1)-indazolone (I), m. 298-300°. Et 2-oxocyclopentanecarboxylate (5.25 g.) and 15 cc. N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O heated 3 hrs. at 125° and cooled gave 1.0 g. 2-hydrazino-2-hydroxycyclopentanecarbohydrazide, m. 184-5° (EtOH). Et 2-oxocyclohexanecarboxylate (3.4 g.), 10 cc. N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O, and 30 cc. EtOH refluxed 2 hrs., cooled, filtered from I, evaporated in vacuo, and kept several days at room temperature deposited 0.1 g. 2-hydrazino-2-hydroxycyclohexanecarbohydrazide, m. 196-8°. Et 1-benzyl-2-oxocyclohexanecarboxylate (II) (15 g.) and 45 cc. N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O refluxed 45 min., cooled, and filtered gave 11 g. 3a-PhCH<sub>2</sub> derivative (III) of I, needles, m. 180-2° (EtOH); the mother liquor concentrated to half-volume and cooled

overnight gave 1.5 g. 1-benzyl-2-hydrazino-2-hydroxycyclohexanecarbohydrazide, m. 143-4° (EtOH). II (4 g.) and 1.65 g. PhNHNH<sub>2</sub> heated 2.5 hrs. at 125°, distilled, and the distillate, b<sub>0.6</sub> 210-14°, triturated with petr. ether (b. 35-60°) gave 1.3 g. 2-Ph derivative of III, m. 78-80°. Et 1-(β-diethylamino-ethyl)-2-oxocyclohexanecarboxylate (3.5 g.) and 10 cc. N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O refluxed 8 hrs. and cooled overnight, the resulting gel dissolved in 50 cc. H<sub>2</sub>O and extracted with Et<sub>2</sub>O, and the extract dried and treated with gaseous HBr yielded 1.5 g. 3a-Et<sub>2</sub>N(CH<sub>2</sub>)<sub>2</sub>NH derivative of I.HCl, m. 184-5° (1:1 EtOH-EtOAc). I (3.75 g.) and 2.42 g. 55% NaNH<sub>2</sub> in 50 cc. dry PhMe refluxed 5 hrs., treated with 1 equivalent BuBr, refluxed 14 hrs., filtered, and evaporated in vacuo gave 1.3 g. 2-Bu derivative of I, needles, m. 114-15°. CF<sub>3</sub>COCH<sub>2</sub>CO<sub>2</sub>Et (IV) (4 g.) and 1.4 g. N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O in 25 cc. EtOH refluxed 2 hrs., evaporated in vacuo, treated with 20 cc. H<sub>2</sub>O, and acidified with concentrated HCl to pH 3 yielded 2.5 g. 3- trifluoromethylpyrazolin-5-one (V), m. 210-12° (1:1 Et<sub>2</sub>O-petr. ether). MeNHNH<sub>2</sub>.H<sub>2</sub>SO<sub>4</sub> (5.9 g.) in 10 cc. H<sub>2</sub>O neutralized with 1 equivalent NaOH, treated with 5.0 g. IV, diluted with 10 cc. H<sub>2</sub>O, refluxed 2 hrs., cooled, and filtered gave 1.1 g. 1-Me derivative of V, m. 174-5.5° (1:1 Et<sub>2</sub>O-petr. ether). IV and PhNHNH<sub>2</sub> heated 4 hrs. at 125° yielded 75% 1-Ph derivative of V, m. 185-7° (aqueous EtOH). 6-Benzyloxy-2,3,4,4a,5,6,7,8-octahydro-3-cinnoline, m. 137-8°, was prepared by the method of Clarke and Lapworth (C.A. 1, 848). The characteristic infrared frequencies of the various compds. were tabulated.

IT 62221-94-7, 3-Indazolinone, 4,5,6,7-tetrahydro-2-phenyl-  
(spectrum of)

RN 62221-94-7 HCAPLUS

CN 3H-Indazol-3-one, 1,2,4,5,6,7-hexahydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 119 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1960:23166 HCAPLUS Full-text

DOCUMENT NUMBER: 54:23166

ORIGINAL REFERENCE NO.: 54:4607f-i

TITLE: Studies on the reaction of carbon monoxide under high pressure. IV. Reaction of carbon monoxide and azobenzene

AUTHOR(S): Horiie, I. Shigeki

CORPORATE SOURCE: Osaka Univ., Sakai

SOURCE: Nippon Kagaku Zasshi (1958), 79, 499-504

CODEN: NPKZAZ; ISSN: 0369-5387

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

ED Entered STN: 22 Apr 2001

AB PhN:NPh (I) (5 g.), 1 g. [Co(CO)<sub>4</sub>]<sub>2</sub> (II), and 25 cc. C<sub>6</sub>H<sub>6</sub> charged in an autoclave, 150 atmospheric CO added, and the mixture heated 4 hrs. at 180-90° and filtered gave 2-(3-hydroxyindazol-2-yl)benzoic acid lactone (III), m. 296°, and (PhNH)<sub>2</sub>CO (IV) from the alkali-insol. part. The alkali-soluble part gave 0.8 g. 3-phenyl-2,4-dioxo-1,2,3,4- tetrahydroquinazoline (V), m. 275°, and 2.8 g. 2-phenylindazolone (VI), m. 204°. o-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CONH<sub>2</sub> (8.0 g.) in 100 cc. Ac<sub>2</sub>O treated with 6.2 g. PhNO and reduced with Zn and EtOH gave 3.0 g. VI. VI (2 g.), 1.0 g. II, and 50 cc. C<sub>6</sub>H<sub>6</sub> treated with 150 atmospheric CO 2 hrs.

at 230° gave 1.8 g. V. Similarly, 5 g. I, II, and CO at 220-30° gave III, IV, and 4.5 g. V. Fe(CO)<sub>5</sub>, Co acetylacetonate, and Co stearate under similar conditions gave 12.3%, 23.1%, and 29.2% V, resp. V (2.0 g.) in 10 cc. 10% NaOH boiled 2.5 hrs., extracted with Et<sub>2</sub>O, and the aqueous layer made up to pH 4.0 gave o-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H (VII), and 2 g. V with 8 g. KOH in 40 cc. EtOH gave 0.8 g. o-(PhNHCONH)C<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H (VIII), m. 187-8° (decomposition). VIII was also prepared from VII and PhNCO. Similarly was prepared o-(PhNHCONH)C<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>Et (IX), m. 148°. Heating 1.0 g. VIII 30 min. at 190° gave 0.05 g. V. VIII (1.0 g.) in 30 cc. EtOH treated with dry HCl. gave 0.9 g. V. IX (0.2 g.) heated 3 hrs. at 200° in a sealed tube yielded 0.03 g. V. VII (5.0 g.) and 5.0 g. PhNHCONH<sub>2</sub> heated 5 hrs. at 200° in a sealed tube gave 2.5 g. V.

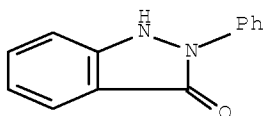
IT 17049-65-9P, 3-Indazolinone, 2-phenyl-

RL: PREP (Preparation)

(preparation of)

RN 17049-65-9 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 120 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1960:11425 HCAPLUS Full-text

DOCUMENT NUMBER: 54:11425

ORIGINAL REFERENCE NO.: 54:2323b-h

TITLE: Synthesis of 2-aminonicotinamides by Raney nickel cleavage of pyrazolo[3,4-b]pyridines

AUTHOR(S): Taylor, Edward C., Jr.; Barton, J. W.

CORPORATE SOURCE: Princeton Univ., Princeton, NJ

SOURCE: Journal of the American Chemical Society (1959), 81, 2448-52

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 54:11425

ED Entered STN: 22 Apr 2001

AB Et cyanoacetate (22.6 g.) 10 ml. 98% H<sub>2</sub>NNHMe and 200 ml. EtOH refluxed 48 hrs. and chilled 3 hrs. at 0° gave 6.1 g. 1-methyl-3-amino-5-pyrazolone, m. 197-8° (EtOH). Evaporation of the mother liquor over 1 week gave 7 g. 2-methyl-3-amino-5-pyrazolone, m. 180-2°. The pyrazolone (I) (0.2 mole) in 20 ml. 5% NaOH stirred and treated 1 hr. at 40-50° with 0.3 mole 1,3-diketone, the mixture adjusted to pH 5 with AcOH and cooled to 0° gave the pyrazolo[3,4-b]pyridine (II). II (10 g.), 100 g. Raney Ni and 1 l. EtOH stirred 3 hrs. at reflux, filtered and extracted with hot EtOH and the combined filtrates dried in vacuo gave the 2-aminonicotinamide (III). 4-Methoxymethyl-6-methyl derivative (IIIa) III of (0.5 g.) and 20 ml. 50% H<sub>2</sub>SO<sub>4</sub> refluxed 3 hrs., poured over ice, and NH<sub>4</sub>OH added to pH 4-5 gave 0.38 g. lactone of 2-amino-4-hydroxymethyl-6-methylnicotinic acid, m. 253-4° (EtOH). The lactone of 2-hydroxy-4-hydroxymethyl-6-methylnicotinic acid (0.41 g.), m 332-4° (decomposition), was obtained by refluxing 1 g. IIIa and 40 ml. 50% H<sub>2</sub>SO<sub>4</sub> 3 hrs., cooling, adding to 100 ml. H<sub>2</sub>O, cooling to 0° and treating with 0.4 g. NaNO<sub>2</sub> in 5 ml. H<sub>2</sub>O, and warming 15 min. at 80°. 2-Anilino-4-methoxymethyl-6-methylnicotinamide (1 g.) treated with 40 ml. 50% H<sub>2</sub>SO<sub>4</sub> as above gave 0.54 g. lactone of 2-anilino-4-hydroxymethyl-6-methylnicotinic acid, m. 151-2°. 3-

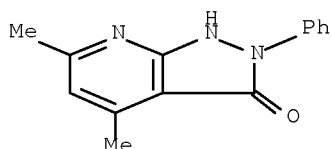
Serial No.:11/880,002

Amino-5-pyrazolone (IVa) (10 g.), 20 ml. MeCOCH<sub>2</sub>CO<sub>2</sub>Et (IV), and 100 ml. 5% NaOH stirred 1 hr. at 50-60°, 100 ml. H<sub>2</sub>O and AcOH (to pH 5) added gave the 3,4-dihydroxy-6-methyl derivative of II (quant.), m. 356-8° (decomposition) (HeONMe<sub>2</sub>); monoacetyl derivative m. 255-6° (decomposition). Alternatively, IVa, 35 ml. IV, and 100 ml. glacial AcOH was refluxed 45 min. cooled, the solid mass ground with EtOH and filtered to give after repetition of this process, 27.6 g. powder which on acetylation gave 3,4-dihydroxy-6-methyl derivative (V) of II acetyl derivative, m. 254-6°. Evaporation of filtrate and extraction with boiling EtOH left a powder, m. 325-7° (EtOH), an isomeric acetyl derivative. Cooling the EtOH extract yielded the diacetyl derivative, decompose above 260°, which gives the monoacetyl derivative, m. 325-7°, on prolonged boiling in EtOH. Hydrolysis of the monoacetyl (m. 325-7°) or diacetyl derivs. with 10% NaOH followed by acidification with AcOH gave the 3,6-dihydroxy-4-methyl derivative (Va) of II. V(10 g.), 100 g. Raney Ni and 1 l. EtOH refluxed 3 hrs., filtered, extracted with EtOH and the filtrates dried yielded 2.1 g. 4-hydroxy-6-methyl derivative of III, m. 242-3° (no color with ethanolic FeCl<sub>3</sub>). Similarly, 10 g. Va yielded 3.3 g. 4-methyl-6-hydroxy derivative of II, m. 249.51° (H<sub>2</sub>O), red-brown color with ethanolic FeCl<sub>3</sub>. 1-Phenyl-3-amino-5-pyrazolone (VI) (8.75 g.), 10 ml. IV, and 50 ml. AcOH refluxed 45 min., cooled and diluted with an equal volume of EtOH gave 9.6 g. condensation product, m.306-8° (decomposition). Alternatively, 4.4 g. VI, 4 ml. IV, and 50 ml. EtOH containing 0.5 g. Na was refluxed and stirred 1 hr., cooled, diluted with Et<sub>2</sub>O and filtered, the solid dissolved in 50 ml. H<sub>2</sub>O and the pH adjusted to 4-5 with AcOH to give 3.4 g. of the same product, m. 307° (decomposition); Ac derivative m. 145-6°.

IT 71290-77-2F, 3H-Pyrazolo[3,4-b]pyridin-3-one, 1,2-dihydro-4,6-dimethyl-2-phenyl- 109103-52-8F, 3H-Pyrazolo[3,4-b]pyridin-3-one, 1,2-dihydro-4-hydroxy-6-methyl-2-phenyl-  
RL: PREP (Preparation)  
(preparation of)

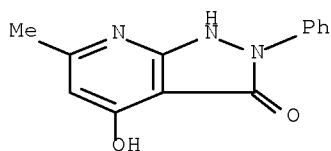
RN 71290-77-2 HCAPLUS

CN 3H-Pyrazolo[3,4-b]pyridin-3-one, 1,2-dihydro-4,6-dimethyl-2-phenyl- (CA INDEX NAME)



RN 109103-52-8 HCAPLUS

CN 3H-Pyrazolo[3,4-b]pyridin-3-one, 1,2-dihydro-4-hydroxy-6-methyl-2-phenyl- (CA INDEX NAME)





Serial No.:11/880,002

L5 ANSWER 121 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1960:1824 HCAPLUS Full-text

DOCUMENT NUMBER: 54:1824

ORIGINAL REFERENCE NO.: 54:336h-i,337a-d

TITLE: Dieckmann reaction. VI. Cyclization of the diethyl ester of  $\alpha$ -acetyl- and  $\alpha$ -benzoylpimelic acid

AUTHOR(S): Zaretskii, V. I.; Vul'fson, N. S.

CORPORATE SOURCE: Sci. Research Inst. Org. Intermediates and Dyes, Moscow

SOURCE: Zhurnal Obshchei Khimii (1959), 29, 416-21

CODEN: ZOKHA4; ISSN: 0044-460X

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

ED Entered STN: 22 Apr 2001

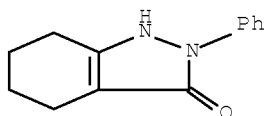
AB cf. C.A. 53, 1177g. To NaHC(Ac)CO<sub>2</sub>Et, from 65 g. ester, 5.75 g. Na, and 100 ml. absolute EtOH, there was added 41.2 g. Et  $\delta$ -chlorovalerate at 10-15°, along with 19.7 g. NaI. and the mixture was refluxed 20 hrs.; after concentration, addition of H<sub>2</sub>O, acidification with H<sub>2</sub>SO<sub>4</sub>, and extraction with C<sub>6</sub>H<sub>6</sub> there was obtained by distillation of the washed organic extract 74.4-6.6% di-Et  $\alpha$ -acetylpmelate (I), b<sub>2.5</sub> 141-6°, n<sub>20D</sub> 1.4445, d<sub>20</sub> 1.0430. The use of Et  $\delta$ -bromovalerate resulted in a 60% yield. Similarly, BzCHNaCO<sub>2</sub>Et, from 96 g. ester and 41.2 g. Et  $\delta$ -chlorovalerate, and 19.7 g. NaI gave, in 14.5 hrs. of refluxing, followed by addition of 8 g. NaI and refluxing 13 hrs. longer, 81.5% di-Et  $\alpha$ -benzoylpimelate (II), b<sub>1.5</sub> 193-4.5°, 1.5000, 1.0900. To 4.7 g. powdered Na in xylene there was rapidly added 38.7 g. I, the mixture was stirred until the exothermic reaction had ceased, then was refluxed with stirring 5-6 hrs., freed of EtOAc by distillation, the residue treated with ice at -5° acidified to Congo red with HCl and extracted with xylene or C<sub>6</sub>H<sub>6</sub>; the washed extract gave 52.2-2.5% 2-carbethoxycyclohexanone (III), b<sub>2.5</sub> 71.5-75°, 1.4780, 1.0675; the results were similar if the reaction was run with addition of 2-3 drops absolute EtOH or in the presence of EtONa which had been freed of EtOH; in the latter case the yield was 55.7%. Heating the product with PhNHNH<sub>2</sub> gave 90.7% 2-phenyl-4,5,6,7-tetrahydro-3-indazolone, m. 179-80°. Similar reaction of 25.8 g. I in the presence of but 2.1 g. powdered Na gave only a 16% yield of III, along with 13.9% EtO<sub>2</sub>C(CH<sub>2</sub>)<sub>5</sub>CO<sub>2</sub>Et. To a solution of EtONa, from 4.5 g. Na and 100 ml. absolute EtOH, there was added 33.5 g. I and the whole was refluxed 3 hrs., concentrated to remove EtOH, treated with ice, acidified with dilute H<sub>2</sub>SO<sub>4</sub>, and extracted with Et<sub>2</sub>O to yield 34.7% EtO<sub>2</sub>C(CH<sub>2</sub>)<sub>5</sub>CO<sub>2</sub>Et and 2.9 g. III. Similar cyclization of 48 g. II with 4.7 g. Na in xylene gave 14.8 g. crude product which, after extraction with 6% KOH, gave 2.9 g. EtOBz and some 55% unisolated III. Refluxing III with EtONa in EtOH 3 hrs. gave mainly unreacted III and 3.1% EtO<sub>2</sub>C(CH<sub>2</sub>)<sub>5</sub>CO<sub>2</sub>Et. Similar treatment of I gave 22% yield, and the use of equimolar amount of EtONa gave a 56% yield. Refluxing I with powdered Na in xylene in the presence of absolute EtOH 5.5 hrs. gave 49% EtO<sub>2</sub>C(CH<sub>2</sub>)<sub>5</sub>CO<sub>2</sub>Et. Hydrolysis of di-Et  $\alpha$ -carbethoxypimelate and esterification of the free acid with EtOH gave 76.7% EtO<sub>2</sub>C(CH<sub>2</sub>)<sub>5</sub>CO<sub>2</sub>Et, b<sub>3</sub> 104-6°, 1.4295, 0.9928; dihydrazide m. 185-5.5°. This (21.6 g.) cyclized by 3 hrs. refluxing with 3.5 g. Na dissolved in absolute EtOH gave 5.8% III and unchanged starting material. Similar cyclization run in xylene with dry EtONa gave 57.6% III.

IT 62221-94-7P, 3-Indazolinone, 4,5,6,7-tetrahydro-2-phenyl-

RL: PREP (Preparation)  
(preparation of)

RN 62221-94-7 HCAPLUS

CN 3H-Indazol-3-one, 1,2,4,5,6,7-hexahydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 122 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1959:6630 HCAPLUS Full-text

DOCUMENT NUMBER: 53:6630

ORIGINAL REFERENCE NO.: 53:1177f-i,1178a-b

TITLE: Dieckman reaction. V. Cyclization of diethyl ester of  $\alpha$ -carbethoxypimelic acid

AUTHOR(S): Vul'fson, N. S.; Zaretskii, V. I.

CORPORATE SOURCE: K. E. Voroshilov Sci. Research Inst. Org. Intermed. and Dyes, Moscow

SOURCE: Zhurnal Obshchei Khimii (1958), 28, 1909-14

CODEN: ZOKHA4; ISSN: 0044-460X

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 53:6630

ED Entered STN: 22 Apr 2001

AB cf. C.A. 52, 13658b. Mono-Et adipate was prepared according to Swann, et al. (Synthesis of Organic Preparations, 1949, volume II, p. 345), 61.8%, b2 129-32.5°, m. 27.4°. This was converted to Et  $\delta$ -bromovalerate (I), 88.7%, b2 71°, n20D 1.4605, d20 1.3085 (cf. Jilek and Michajlyszyn, C.A. 49, 9507e).

Hydrolysis of 1,1,1,5-tetrachloropentane gave 52.5%  $\delta$ -chlorovaleric acid, b2.5 101.5°, b2 101.5°, m. 18.25°, n20D 1.4545, d20 1.1644, which with EtOH and H2SO4 in C6H6 gave 86% Et  $\delta$ -chlorovalerate (II), b1.5 53°, b1 52.5°, n20D

1.4305, d20 1.0518. I with NaCH(CO2Et)2 in hot EtOH gave 75.5% di-Et  $\alpha$ -carbethoxypimelate (III), b2 146.5-50°, n20D 1.4380, d20 1.0561; from II the yield was 83%. III (43.2 g.) and 0.3 ml. dry EtOH was added to 4.7 g.

powdered Na in xylene and after stirring 10 min. the mixture was refluxed 5-6 hrs. yielding after an aqueous treatment 57% 2,6-dicarbethoxycyclohexanone (IV), b12 165-75°, n18.5D 1.4692, d18.5 1.1239; with PhNHNH2 it gave 86% 1-phenyl-3,4,1',2'-tetrahydrobenzo-3-carbethoxypyrazol-5-one, m. 151-1.5°. IV (17 g.) in 34 ml. dry MeOH was treated with 12 ml. MeI, then at -15°, with

MeONa from 3.5 g. Na, and kept overnight at 0°; after refluxing until neutral, the mixture was concentrated, treated with H2O, and extracted with Et2O

yielding 75% 2,6-dimethyl-2,6-dicarbethoxycyclohexanone (V), b2 113-16°, n20D 1.4620-1.4625; to sep. a trace of unmethylated product V was treated with cold 15% KOH and H2O, yielding a pure product, b3 123.5-6.5°, n20D 1.4615, d20

1.086. This kept 12 days with MeOH-KOH gave after an aqueous treatment, extraction with Et2O, and acidification of the aqueous solution followed by steam distillation 50.5% 2,6-dimethylcyclohexanone, b743 167-70.5°, n20D

1.4475-1.4480, d20 0.9087; semicarbazone, m. 181-2°. IV (18.2 g.) in 34 ml. MeOH was treated with 6.5 ml. MeI and MeONa from 1.9 g. Na yielding after 24 hrs. near 0° 72.8% 2-methyl-2,6-dicarbethoxycyclohexanone, b1 112-14°, n20D

1.4645-1.4655, d20 1.0986 (a violet color with FeCl3); this decarboxylated as above yielded 37.3% 2-methylcyclohexanone, b730 162.5-6°, n20D 1.4485, d20 0.9224; semicarbazone, m. 188.5-9°.

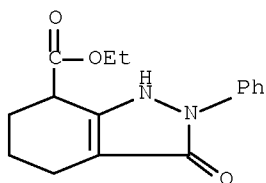
IT 101289-05-8P, 7-Indazolinecarboxylic acid, 4,5,6,7-tetrahydro-3-oxo-2-phenyl-, ethyl ester

RL: PREP (Preparation)  
(preparation of)

RN 101289-05-8 HCAPLUS

CN 7-Indazolinecarboxylic acid, 4,5,6,7-tetrahydro-3-oxo-2-phenyl-, ethyl

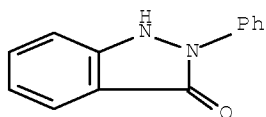
ester (6CI) (CA INDEX NAME)



L5 ANSWER 123 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1958:82938 HCAPLUS  
 DOCUMENT NUMBER: 52:82938  
 ORIGINAL REFERENCE NO.: 52:14701a  
 TITLE: 3-Indazolone  
 INVENTOR(S): Murahashi, Shunsuke; Horie, Shigeki  
 PATENT ASSIGNEE(S): Osaka University  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 32008925	B4	19571019	JP	<--

ED Entered STN: 22 Apr 2001  
 AB PhN:NPh (5 g.) in 20 ml. C<sub>6</sub>H<sub>6</sub> and 1 g. [Co(CO)<sub>4</sub>]<sub>2</sub> in an autoclave with CO at 100 atmospheric heated 2 hrs. at 190-200°, the product distilled, the distillate taken up in 2% NaOH and acidified with HCl gave 3.2 g. 2-phenyl-3-indazolone, needles, m. 204°.  
 IT 17049-65-9P, 3-Indazolinone, 2-phenyl-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 17049-65-9 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 124 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1958:55949 HCAPLUS Full-text  
 DOCUMENT NUMBER: 52:55949  
 ORIGINAL REFERENCE NO.: 52:10106g-i,10107a-i,10108a-i  
 TITLE: Pteridines. XVI. A synthesis of 2-aminopyrazine-3-carboxamides by reductive ring cleavage of 3-hydroxy-1-pyrazolo[b]pyrazines  
 AUTHOR(S): Taylor, E. C., Jr.; Barton, J. W.; Osdene, T. S.  
 CORPORATE SOURCE: Princeton Univ., Princeton, NJ

SOURCE: Journal of the American Chemical Society (1958), 80, 421-7  
 CODEN: JACSAT; ISSN: 0002-7863  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 OTHER SOURCE(S): CASREACT 52:55949

ED Entered STN: 22 Apr 2001

AB cf. C.A. 50, 13047b. PhN:NCH(CN)CO<sub>2</sub>Et (I) (4.1 g.) and 25 cc. EtOH refluxed 15 min. with 1.4 g. N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O, cooled to 0°, and filtered yielded 3.6 g. 3-hydroxy-4-phenylazo-5-aminopyrazole (II), deep red needles, m. 256° (decomposition). HON:C(CN)CONHNH<sub>2</sub> N<sub>2</sub>H<sub>4</sub> salt (III) (5.0 g.) in 25 cc. 40% aqueous NaOH kept 1 hr. at 60°, acidified with glacial AcOH, and filtered gave 3.87 g. 3-hydroxy-4-nitroso-5-aminopyrazole (IV); a similar run heated 0.5 hr. on the steam bath gave 2.56 g. IV. III (5.0 g.) in 100 cc. EtOH containing 6 g. Na refluxed 4 hrs. with stirring and filtered, and the residue dissolved in 25 cc. H<sub>2</sub>O, acidified with glacial AcOH, and cooled gave 4.0 g. IV. II (4.0 g.) in 50 cc. 98% HCO<sub>2</sub>H hydrogenated at 3 atmospheric over 0.4 g. 10% Pd-C, filtered, and evaporated, the residue triturated with 1:1 EtOH-Et<sub>2</sub>O, and the undissolved material recrystd. with C from H<sub>2</sub>O gave 2.95 g. diformyl derivative (V) of 3-hydroxy-4,5-diaminopyrazole (VI), m. 212-13° (decomposition). IV (2.0 g.) in 40 cc. 98% HCO<sub>2</sub>H hydrogenated over 10% Pd-C yielded 2.05 g. V. V (8 g.) in 30 cc. 50% H<sub>2</sub>SO<sub>4</sub> warmed to beginning crystallization, diluted with boiling H<sub>2</sub>O to solution, and cooled slowly yielded 9.4 g. VI.H<sub>2</sub>SO<sub>4</sub>, light yellow crystals. I (32.5 g.), 7.5 cc. 99% MeNHNH<sub>2</sub>, and 250 cc. EtOH refluxed 4 hrs. and cooled to 0° gave 27 g. 1-Me derivative (VII) of II, m. 265° (EtOH). HON:C(CN)CO<sub>2</sub>Et (7.1 g.), 5 cc. 99% MeNHNH<sub>2</sub>, and 30 cc. EtOH refluxed 3 hrs., refluxed 1 hr. with stirring with 30 cc. 30% alc. KOH, cooled to 0°, and filtered, and the residue dissolved in 20 cc. H<sub>2</sub>O and adjusted with AcOH to pH 5 yielded 2.9 g. 1-Me derivative (VIII) of IV, m. 184-6°; 2nd crop, 0.3 g. VII (20 g.) in 100 cc. 90% HCO<sub>2</sub>H hydrogenated 45 min. at 3 atmospheric over 1 g. 10% Pd-C, filtered, and evaporated in vacuo, the residual oil washed with Et<sub>2</sub>O and dissolved in 70 cc. EtOH, and the solution cooled gave 12.8 g. monoformyl derivative (IX) of the 1-Me derivative (X) of VI, m. 210°; it gave recrystd. from aqueous EtOH a lower-melting hydrate, m. 188-9° with loss of moisture at 133-5°. VIII (2.0 g.) in 40 cc. 90% HCO<sub>2</sub>H hydrogenated in the usual manner and evaporated in vacuo, and the residual brown oil dissolved in a small amount of EtOH and cooled at 0° yielded 1.5 g. IX, m. 188-90°. IX (10 g.) recrystd. from 30 cc. 20% H<sub>2</sub>SO<sub>4</sub> containing 25 cc. EtOH yielded 13.9 g. X.H<sub>2</sub>SO<sub>4</sub>, m. above 300°. 1-Phenyl-3-hydroxy-5-aminopyrazole (5.25 g.) in 50 cc. 10% aqueous NaOH added dropwise to PhN<sub>2</sub>Cl in NaOAc buffer (from 3 g. PhNH<sub>2</sub>, 6 cc. concentrated HCl, 2.1 g. NaNO<sub>2</sub>, and 12 cc. H<sub>2</sub>O) stirred 0.5 hr., and filtered gave 7.95 g. 1-Ph derivative (XI) of II, deep yellow plates, m. 266-8° (decomposition) (Cellosolve). 2-Phenyl-3-hydroxy-5-aminopyrazole yielded similarly 91% 2-Ph derivative (XII) of II, purple-red needles, m. 194-5° (EtOH). I (40 g.), 20 cc. PhNHNH<sub>2</sub>, and 200 cc. iso-AmOH refluxed 24 hrs., cooled to room temperature, and filtered, and the residue washed with 100 cc. cold EtOH gave 24.2 g. XII; the mother liquor kept at 0° overnight deposited 1.8 g. phenylazomalonamide phenylhydrazide N-phenylhydrazide, yellow needles, m. 187-8° (EtOH). I (4 g.) and 2 cc. PhNHNH<sub>2</sub> refluxed 20 hrs. with 0.87 g. Na in 75 cc. iso-AmOH and evaporated in vacuo, the residue triturated with 50% aqueous AcOH, the resulting solid extracted with 200 cc. boiling EtOH, and the extract concentrated to 50 cc. and cooled yielded 1.39 g. XII; the EtOH-insol. residue recrystd. from Cellosolve yielded 0.82 g. XI, m. 266-8° (decomposition). XI (5.0 g.) in 50 cc. 90% HCO<sub>2</sub>H hydrogenated 1 hr. at room temperature and 3 atmospheric over 0.5 g. 10% Pd-C, filtered, and evaporated in vacuo, and the oily residue triturated with 50 cc. 1:3 EtOH-Et<sub>2</sub>O gave 3.1 g. monoformyl derivative (XIII) of 1-phenyl-3-hydroxy-4,5-diaminopyrazole (XIV), plates, m. 223-5° (decomposition) (aqueous EtOH). Crude XIII (3.1 g.) warmed on a water bath with 3 cc. concentrated H<sub>2</sub>SO<sub>4</sub>, 7 cc. H<sub>2</sub>O, and 3 cc. EtOH, diluted with 4

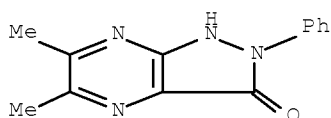
cc. EtOH, and cooled gave 4.8 g. XIV.H<sub>2</sub>SO<sub>4</sub>, yellow needles. XII (8.0 g.), 100 cc. 90% HCO<sub>2</sub>H, and 0.8 g. 10% Pd-C hydrogenated at 3 atmospheric yielded 4.8 g. monoformyl derivative (XV) of 2-phenyl-3-hydroxy-4,5-diaminopyrazole (XVI), m. 235° (decomposition) (aqueous EtOH). XII (12 g.) converted to the XV and the crude product crystallized from 1:1 30% H<sub>2</sub>SO<sub>4</sub>-EtOH yielded 11.6 g. XVI.H<sub>2</sub>SO<sub>4</sub>, orange plates. VI.H<sub>2</sub>SO<sub>4</sub> (20 g.) and 28 g. glyoxal-NaHSO<sub>3</sub> adduct (XVII) in 250 cc. H<sub>2</sub>O treated dropwise with stirring at 60°, stirred 0.5 hr., adjusted to pH 5, cooled to 0°, and filtered gave 9.9 g. 3-hydroxy-1-pyrazolo[b]pyrazine (XVIII), yellow, m. 314-15° (decomposition). VI.H<sub>2</sub>SO<sub>4</sub> (1.5 g.) in 10 cc. H<sub>2</sub>O treated with shaking with 1 cc. Ac<sub>2</sub> and filtered yielded 0.93 g. 5,6-di-Me derivative (XIX) of XVIII, yellow, m. 325° (decomposition) (sublimed at 230°/0.1 mm.). VI.H<sub>2</sub>SO<sub>4</sub> (4.2 g.), 6.3 g. Bz<sub>2</sub>, 1.2 g. NaOH, 30 cc. EtCOMe, 30 cc. EtOH, and 20 cc. H<sub>2</sub>O refluxed 1.5 hrs., concentrated in vacuo to about 1/6 its original volume, basified with aqueous NaOH, treated with C, and filtered, the filtrate acidified with HCl, and the precipitate repptd. from aqueous NaOH with HCl and dried azeotropically with C<sub>6</sub>H<sub>6</sub> yielded 3.5 g. 5,6-di-Ph derivative (XX) of XVIII, yellow, m. 269° (decomposition) (EtOAc). X.H<sub>2</sub>SO<sub>4</sub> (4.52 g.), 5.6 g. XVII, and 40 cc. H<sub>2</sub>O adjusted slowly with stirring to pH 5, kept at room temperature overnight, and filtered gave 2.84 g. 1-Me derivative (XXI) of XVIII, bright yellow needles, m. 242-3° (sublimed at 200°/0.1 mm.). XVIII (1.0 g.) in 10 cc. 10% aqueous NaOH treated at 60° with stirring with 1.4 g. MeI and evaporated in vacuo after 45 min., and the residue dissolved in a little H<sub>2</sub>O and repptd. with AcOH (pH 5) yielded 0.62 g. XXI. X.H<sub>2</sub>SO<sub>4</sub> (1.13 g.), 0.5 cc. Ac<sub>2</sub>, and 10 cc. H<sub>2</sub>O treated dropwise with NH<sub>4</sub>OH to pH 7-8 and readjusted to pH 5 after 10 min. with AcOH gave 0.78 g. 1,5,6-tri-Me derivative of XVIII, m. 268-9° (EtOH and sublimed at 200°/0.1 mm.). X.H<sub>2</sub>SO<sub>4</sub> (1.0 g.), 1 g. Bz<sub>2</sub>, 10 cc. H<sub>2</sub>O, 10 cc. EtAc, and 10 cc. EtOH adjusted to pH 8 with 40% aqueous NaOH, refluxed 1.5 hrs., kept at room temperature overnight, and concentrated in vacuo, the residue diluted with H<sub>2</sub>O, the suspension adjusted with NaOH to pH 9, and the solution heated to boiling, treated with C, filtered, and acidified with AcOH yielded 0.35 g. 1-Me derivative of XX, m. 258-60° (EtOH and sublimed at 200°/0.1 mm.). XVIII (15 g.) in 150 cc. 10% aqueous NaOH and 15 cc. EtOH treated with 15 cc. PhCH<sub>2</sub>Cl, evaporated after 1 hr. in vacuo, acidified with 50% aqueous AcOH, and filtered gave 18.4 g. 1-PhCH<sub>2</sub> derivative (XXII) of XVIII, pale yellow needles, m. 175-6° (MeOH). XIV.H<sub>2</sub>SO<sub>4</sub> (12 g.) and 13 g. XVII in 150 cc. H<sub>2</sub>O adjusted slowly with concentrated NH<sub>4</sub>OH to pH 7-8, stirred 45 min., readjusted to pH 5 with glacial AcOH, and cooled to 0° yielded 7.7 g. 1-Ph derivative (XXIII) of XVIII, lime-green needles, m. 227-9° (aqueous EtOH). XVI.H<sub>2</sub>SO<sub>4</sub> (37 g.), 40 g. XVII, and 400 cc. H<sub>2</sub>O gave in the same manner 23.2 g. 2-phenyl-1-pyrazolo[b]pyrazin-3(2H)-one (XXIV), pale green plates, m. 232-3.5° (EtOH). XVI.H<sub>2</sub>SO<sub>4</sub> (0.96 g.), 0.4 cc. Ac<sub>2</sub>, and 100 cc. H<sub>2</sub>O yielded in the same manner 0.8 g. 5,6-di-Me derivative of XXIV, m. 239-40°, which recrystd. from EtOH and sublimed at 200°/0.1 mm. gave another polymorphic form, m. 193-5°. VI.H<sub>2</sub>SO<sub>4</sub> (8.5 g.) and 8.8 g. NaHSO<sub>3</sub> in 100 cc. H<sub>2</sub>O treated with 6 cc. 47.5% AcCHO, treated dropwise with stirring at 60° until the pH reached 7-8, stirred 45 min., adjusted with dilute AcOH to pH 4-5, and cooled to 0° gave 3.83 g. 6-Me derivative (XXV) of XVIII, light yellow needles, m. 319-21° (H<sub>2</sub>O); the mother concentrated in vacuo to 1/3 the original volume and kept 24 hrs. at 0° gave 1.15 g. 5-Me derivative (XXVI) of XVIII, buff-colored prisms, m. 234-5° (EtOH). XVIII (1.0 g.), 20 cc. HCONH<sub>2</sub>, and 3 g. Raney Ni heated 1.5 hrs. with stirring at 115-20°, treated with an addnl. 2 g. catalyst, heated again 1.5 hrs. with stirring, filtered, and cooled yielded 0.58 g. 2-aminopyrazine-3-carboxamide (XXVII), m. 244-5°. XIX (0.5 g.), 50 cc. 95% EtOH, and 6 g. Raney Ni refluxed 2 hrs., filtered, and evaporated, and the solid residue sublimed at 200°/0.1 mm. gave 0.28 g. 5,6-di-Me derivative (XXVIII) of XXVII, light yellow, m. 255°. IV (1.28 g.) in 40 cc. H<sub>2</sub>O containing 2 cc. concentrated NH<sub>4</sub>OH refluxed 7 hrs. with 1.2 g. Ac<sub>2</sub> and 4 g. Raney Ni, filtered, and cooled to 0° gave 0.32 g. XXVIII; the Raney Ni residue extracted with boiling EtOH gave an addnl. 0.06 g. XXVIII. XX (1.0 g.), 50 cc. 95% EtOH, and 8 g. Raney Ni

refluxed 3 hrs., filtered, and evaporated in vacuo, the residue triturated with H<sub>2</sub>O and filtered, and the insol. portion washed, dried (0.8 g.), and sublimed at 190°/0.01 mm. yielded the 5,6-di-Ph derivative of XXVII, bright yellow, m. 203-5°. XXI (1.0 g.), 100 cc. 95% EtOH, and 5 g. Raney Ni refluxed 2.5 hrs., filtered, and evaporated in vacuo gave 0.38 g. 2-MeNH analog of XXVII, light yellow rods, m. 200-1° (sublimed at 180°/0.1 mm.). XXIII (6 g.), 60 g. Raney Ni, and 600 cc. EtOH refluxed 4 hrs. with stirring and filtered through Celite, the filter cake extracted with hot EtOH, the combined filtrate and washing evaporated in vacuo, and the residue (3.2 g.) recrystd. gave the 2-PhNH analog of XXVII, greenish yellow plates from EtOH by slow crystallization or needles by rapid cooling, m. 175-6°. XXIV (5.0 g.), 500 cc. 95% EtOH, and 50 g. Raney Ni refluxed 3 hrs. and filtered, the residue washed with hot EtOH, the combined alc. solns. evaporated, and the residue sublimed at 160-70°/15 mm. yield 52% 2-aminopyrazine-3-carboxylic acid anilide (XXIX), needles, m. 106-7° (EtOH). XXIX (2.0 g.) and 50 cc. 10% aqueous NaOH refluxed 2.5 hrs., diluted with 50 cc. H<sub>2</sub>O, cooled, and extracted with Et<sub>2</sub>O, and the aqueous layer adjusted to pH 5 gave 2-aminopyrazine-3-carboxylic acid (XXX), m. 200-1°; the Et<sub>2</sub>O extract evaporated and the residual oil treated with Ac<sub>2</sub>O gave 0.41 g. AcNHPh, m. 112-13°. XXII (3.75 g.), 40 g. Raney Ni, and 400 cc. EtOH refluxed 3 hrs. with stirring gave in the usual manner 0.24 g. unchanged XXII and 1.35 g. 2-PhCH<sub>2</sub>NH analog (XXXI) of XXVII, needles, m. 125-6° (EtOH). XXXI (1.0 g.) and 10 cc. 10% aqueous NaOH refluxed 2 hrs., adjusted to pH 4 with dilute HCl, cooled, and filtered gave 0.78 g. 2-PhCH<sub>2</sub>NH derivative of XXX, plates, m. 166.5-68° (aqueous EtOH). XXVI (2 g.), 20 g. Raney Ni, and 200 cc. EtOH refluxed 4 hrs. with stirring gave 0.93 g. 5-Me derivative of XXVII, m. 203-4° (MeOH). XXV gave similarly 51.5% 6-Me derivative (XXXII) of XXVII, pale yellow, m. 235-6° (sublimed at 160-70°/18 mm.). XXXII (1.0 g.) and 10 cc. 10% aqueous NaOH refluxed 2 hrs., adjusted to pH 4 with dilute HCl, cooled to 0°, and filtered gave 0.72 g. 6-Me derivative of XXX, m. 211-12° (decomposition) (aqueous EtOH).

IT 109966-85-0P, 3H-Pyrazolo[3,4-b]pyrazin-3-one,  
1,2-dihydro-5,6-dimethyl-2-phenyl- 118898-07-0P,  
3H-Pyrazolo[3,4-b]pyrazin-3-one, 1,2-dihydro-2-phenyl-  
RL: PREP (Preparation)  
(preparation of)

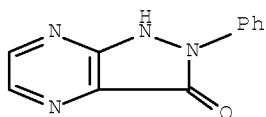
RN 109966-85-0 HCAPLUS

CN 3H-Pyrazolo[3,4-b]pyrazin-3-one, 1,2-dihydro-5,6-dimethyl-2-phenyl- (CA  
INDEX NAME)



RN 118898-07-0 HCAPLUS

CN 3H-Pyrazolo[3,4-b]pyrazin-3-one, 1,2-dihydro-2-phenyl- (6CI) (CA INDEX  
NAME)



L5 ANSWER 125 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1957:9344 HCAPLUS Full-text

DOCUMENT NUMBER: 51:9344

ORIGINAL REFERENCE NO.: 51:1949g-h

TITLE: The reaction of azobenzene and carbon monoxide

AUTHOR(S): Murahashi, Shunsuke; Horie, Shigeki

CORPORATE SOURCE: Univ. Osaka

SOURCE: Journal of the American Chemical Society (1956  
, 78, 4816-17

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 51:9344

ED Entered STN: 22 Apr 2001

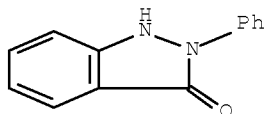
AB cf. C.A. 50, 10044g. Ph<sub>2</sub>N<sub>2</sub> reacts with 1 mole CO (150 atmospheric pressure in all cases) at 190° in the presence of Co<sub>2</sub>(CO)<sub>8</sub> to yield 55% 2-phenylindazoline (I), m. 204°, a small amount of 3-phenyl-2,4-dioxo-1,2,3,4-tetrahydroquinazoline (II), and (PhNH)<sub>2</sub>CO. Ph<sub>2</sub>N<sub>2</sub> with 2 moles CO at 230° yielded 80% II, m. 277°. The yield was less when Fe(CO)<sub>5</sub> was used instead of Co<sub>2</sub>(CO)<sub>8</sub>. p-ClC<sub>6</sub>H<sub>4</sub>N<sub>2</sub>Ph with CO and Co<sub>2</sub>(CO)<sub>8</sub> at 230° yielded 23.8% 2-phenyl-5-chloroindazolone, m. 233°, and 45% 3-phenyl-6-chloro-2,4-dioxo-1,2,3,4-tetrahydroquinazoline, m. 264°; p-Me<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>N<sub>2</sub>Ph yielded 80% 2-phenyl-5-dimethylaminoindazolone, m. 217°, and 18% 3-phenyl-6-dimethylamino-2,4-dioxo-1,2,3,4-tetrahydroquinazoline, m. 281°.

IT 17049-65-9P, 3-Indazolinone, 2-phenyl- 28561-70-8P,  
3-Indazolinone, 5-chloro-2-phenyl- 101091-21-8P, 3-Indazolinone,  
5-dimethylamino-2-phenyl-  
RL: PREP (Preparation)

(preparation of)

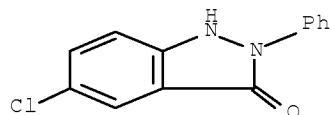
RN 17049-65-9 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



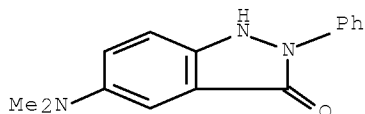
RN 28561-70-8 HCAPLUS

CN 3-Indazolinone, 5-chloro-2-phenyl- (6CI, 8CI) (CA INDEX NAME)

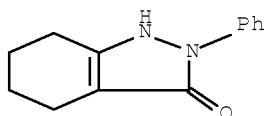


RN 101091-21-8 HCAPLUS

CN 3-Indazolinone, 5-dimethylamino-2-phenyl- (6CI) (CA INDEX NAME)



L5 ANSWER 126 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1954:18298 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 48:18298  
 ORIGINAL REFERENCE NO.: 48:3342h-i,3343a  
 TITLE: Isoxazole derivatives. V. Reaction of hydrazine on 5-aminoisoxazoles. 1  
 AUTHOR(S): Kano, Hideo  
 CORPORATE SOURCE: Shionogi & Co., Amagasaki  
 SOURCE: Yakugaku Zasshi (1953), 73, 383-7  
 CODEN: YKKZAJ; ISSN: 0031-6903  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 ED Entered STN: 22 Apr 2001  
 GI For diagram(s), see printed CA Issue.  
 AB cf. C.A. 47, 6936g. O.N:CR.CR':CNH2 (I, R = Me) (IA) (5 g.) and 5 g. 50% N2H4.H2O heated 2.5 hrs. on a water bath, and the product filtered and recrystd. from H2O give 2.5 g. NH.NH.CO.CR':CR (II, R = Me) (IIA), prisms, m. 271-2°; 1 g. IIA and 2 ml. Ac2O boiled 30 min., cooled, a small amount of water added, and the precipitate recrystd. from MeOH give NAc.NAc.CO.CR':CR (III, R = Me) (IIIA), needles, m. 54°. Similarly are prepared the following derivs. of I, II, and III, resp. (R, R', and m.p. given): Me, Et, 89-90°, 229-30°, 57°; Me, Pr, 77-8°, 211-2°, 40-1°; Me, PhCH2, 79°, 230-1°, 69°; (R + R' =) (CH2)4, 119° 285-6° (decomposition), 79-80°. IA (5 g.) and 5 g. PhNHNH2 heated 8 hrs. at 100° and the product extracted with Et2O give 1.9 g. 4,4'-bis(1-phenyl-3,4-dimethyl-5-pyrazolone), prisms, m. 165°. 3-Methyl-, 3-phenyl-, 3-benzyl-4-phenyl-, 3-ethyl-4-methyl-, and 3-butyl-4-propyl-5-aminoisoxazole with N2H4.H2O or PhNHNH2 do not give pyrazolone derivs. AcCHMeCONH2 (0.5 g.) and 1 g. 50% N2H4.H2O heated 15 min. on a water bath and the product recrystd. from alc. give IIA, m. 270-1°.  
 IT 62221-94-7P, 3-Indazolinone, 4,5,6,7-tetrahydro-2-phenyl-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 62221-94-7 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2,4,5,6,7-hexahydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 127 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1934:44966 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 28:44966  
 ORIGINAL REFERENCE NO.: 28:5445c-f



TITLE: Isomerization of 4,6-dinitrobenzylideneaniline  
 AUTHOR(S): Secareanu, S.; Lupas, I.  
 SOURCE: Bull. soc. chim. [5] (1934), 1, 373-80  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable

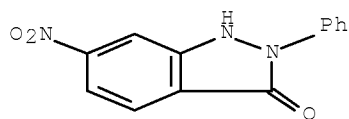
ED Entered STN: 16 Dec 2001

AB cf. C. A. 28, 4047.9. The relations between an o-NO<sub>2</sub> radical and the -CH:N- group as demonstrated by the isomerization of 2,4,6- (O<sub>2</sub>N)<sub>3</sub>C<sub>6</sub>H<sub>2</sub>CH:NPh (I) have been elucidated by a study of the analogous isomerization of the corresponding dinitro and o-nitro compds. A mixture of 3 g. of 2,4-(O<sub>2</sub>N)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CH:NPh, m. 133°, and 3 g. powdered Na<sub>2</sub>CO<sub>3</sub> in 30 cc. EtOH was refluxed for 7 hrs. and filtered while hot. The cold solution was filtered and treated with AcOH, yielding 0.45 g. of crystalline 6-nitro-3-hydroxy-2-phenylindazole (II), C<sub>13</sub>H<sub>9</sub>N<sub>3</sub>O<sub>3</sub>, m. above 260°; Ac derivative, C<sub>15</sub>H<sub>11</sub>N<sub>3</sub>O<sub>4</sub>, m. 190-1°; Bz derivative, m. 171°. Concentration of the mother liquor and extraction with cold CHCl<sub>3</sub> produced a Na salt, exploding on heating, which, on treatment with HCl, gave 6-nitro-1-N-hydroxy-2-phenylindazolone (III), C<sub>13</sub>H<sub>9</sub>N<sub>3</sub>O<sub>4</sub>, m. 166-7°. The addition of excess EtI to a suspension of 0.4 g. of the Ag salt of II in C<sub>6</sub>H<sub>6</sub> yielded, on boiling for 30 mins., needle-shaped crystals of 6-nitro-1-N-hydroxy-3-ethoxy-2-phenylindazolone, C<sub>15</sub>H<sub>13</sub>N<sub>3</sub>O<sub>4</sub>, m. 64-5°. The formation of indazolone derivs. from I and II shows that this transformation is a characteristic property of these o-nitrobenzylideneanilines. Under the action of alc. Na<sub>2</sub>CO<sub>3</sub> III is evidently susceptible of transformation into II. Prolonged treatment with alc. Na<sub>2</sub>CO<sub>3</sub> leaves o-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH:NPh unchanged.

IT 403665-52-1, 3-Indazolol, 6-nitro-2-phenyl-  
 (and derivs.)

RN 403665-52-1 HCAPLUS

CN 3H-Indazol-3-one, 1,2-dihydro-6-nitro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 128 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1926:20421 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 20:20421

ORIGINAL REFERENCE NO.: 20:2495h-i,2496a-h

TITLE: Miscellaneous observations on indazole derivatives

AUTHOR(S): v. Auwers, K.; Strodter, P.

SOURCE: Berichte der Deutschen Chemischen Gesellschaft  
 [Abteilung] B: Abhandlungen (1926), 59B,  
 529-38

CODEN: BDCBAD; ISSN: 0365-9488

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

ED Entered STN: 16 Dec 2001

AB 1. Arylhydroxyindazole and 3-arylindazoles. It had been found (cf. C. A. 16, 3654 and earlier papers) that the diazo compds. obtained from o-NH<sub>2</sub> ketones H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>COR give with Na<sub>2</sub>SO<sub>4</sub> (the action of which may be strengthened by Na-Hg) 3-alkylindazoles when R is an alkyl, but when R is Ph the expected 3-phenylindazole (I) is formed only in subordinate amount, the chief product being 2-hydroxy-3-phenylindazole which is slowly converted by boiling alkalies into the 3,2-isomer. I is also noteworthy in that it occurs in 2 mutually interconvertible forms. The results described in the present paper indicate

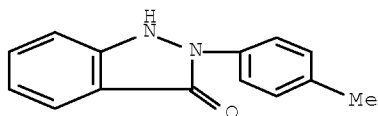
that the reaction with  $\text{Na}_2\text{SO}_3$  proceeds essentially in the same way in all cases where R is an aryl residue; 4'-methyl- (II) and 4'-methoxy-2-aminobenzophenone (III) yield chiefly 3-p-tolyl- (IV) and 3-p-anisyl-2-hydroxyindazole (V), which, like the Ph derivative, are rather unstable compds. of acid character, lose N and change into  $\text{MeC}_6\text{H}_4\text{COPh}$  and  $\text{MeOC}_6\text{H}_4\text{COPh}$ , resp., when heated above their m. p., are rearranged by boiling alkalies into their 2,3-isomers and are reduced by  $\text{SnCl}_2$  to 3-p-tolyl- (VI) and 3-p-anisylindazole (VII). Thus far, it has not been possible to isolate the VI and VII in 2 different forms, but as the products obtained showed no sharp m p. after repeated crystns. and other purifications the possibility of the existence of 2 such forms is not excluded; not enough of them was available for a more thorough study of their properties.

2. Reductive cleavage of 2-phenylindazole. According to Paal, 2-phenylindazole (VIII) in hot absolute alc. with Na gives its 1,3-dihydro derivative (IX), m.  $98^\circ$ . In attempting to repeat his work, v. A. and S. obtained, instead of IX, o- $\text{H}_2\text{NC}_6\text{H}_4\text{CH}_2\text{NHPH}$  (X), m.  $87^\circ$ ; the experiment was then repeated 5 times with slight modifications in the conditions and in 3 cases X was again obtained while in the other 2 the product had the same appearance and slight solubility in alc. as IX but m.  $153^\circ$  (in a later preparation the m. p. could not be raised above  $136^\circ$ ); analysis indicated that these preps. were not quite pure IX; on short heating on the  $\text{H}_2\text{O}$  bath they regenerated VIII and also changed rapidly in the air. It seems clear that the primary product of reduction is IX but that on more energetic treatment with Na and alc. the pyrazole ring is ruptured with surprising ease.

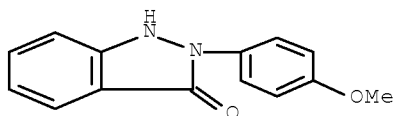
3. Some derivatives of indazole-3-carboxylic acid. Most esters of indazole-1-carboxylic acid when heated under suitable conditions lose  $\text{CO}_2$  with formation, together with resinous products, of both 1- and 2-alkylindazoles, the latter sometimes, indeed, being the chief products. To determine whether a negative substituent in position 3 would influence the course of this reaction the decomposition of some indazole-1,3-dicarboxylic esters has been studied. These compds. are readily obtained when, e. g., Me indazole-3-carboxylate (XI) is boiled with  $\text{ClCO}_2\text{Me}$  or  $\text{ClCO}_2\text{Et}$  and on decomposition they yield, together with products of more deep-seated decomposition, the 1-alkyl derivs. exclusively; apparently the 3- $\text{CO}_2\text{Me}$  group hinders the migration of the alkyl group to the adjacent 2-N atom. Similarly, while indazole heated with allyl bromide gives exclusively the 2-derivative and I gives both the 1- and 2-derivs., Et indazole-3-carboxylate (XII) gives only the 1-derivative. With o- $\text{O}_2\text{NC}_6\text{H}_4\text{COCl}$ , which is especially well adapted to the preparation of 2-acylindazoles, XII gives no 2-derivative IV (yield, 65%), colorless or only faintly yellowish and almost odorless, stable for a long time, but not indefinitely in cork-stoppered vessels but quickly decomp. in the air and light, m.  $119^\circ$  (gas evolution). 2,3-Isomer (obtained in about 50% yield, together with about 1 g. p- $\text{MeC}_6\text{H}_4\text{COPh}$ , m.  $59^\circ$ , b.  $327-8^\circ$ , from 3 g. IV in 2% NaOH treated with steam until no more oil distilled over (about 2.5 hrs.)), begins to turn brown  $190^\circ$ , shrinks  $200^\circ$  and m.  $215^\circ$ , soluble in concentrated  $\text{H}_2\text{SO}_4$  with yellow color; acetate, m.  $98^\circ$ ; benzoate, m.  $154-5^\circ$ . VI, softens  $91^\circ$ , m.  $97-8^\circ$ ; picrate, yellow, m.  $147-8^\circ$ ; Ac derivative, m.  $79.5-80.5^\circ$ . V, m.  $132^\circ$  (gas evolution), is partly changed on attempted recrystn. from  $\text{C}_6\text{H}_6$ ; 2,3-isomer (2.6 g., together with 0.3 g. p- $\text{MeOC}_6\text{H}_4\text{COPh}$  from 4 g. V), darkens  $153^\circ$ , sinters  $163^\circ$ , gives an intensely yellow color in alc. with  $\text{Ca}(\text{OCl})_2$ , soluble in concentrated  $\text{H}_2\text{SO}_4$  with orange-yellow color; acetate, m.  $110^\circ$ ; benzoate, m.  $139.5-40^\circ$ . VII, oil which on distillation (about  $205^\circ$ ) under 10 mm. changed into a resinous mass and was obtained in crystalline form, m.  $110-1^\circ$ , only after purification through the Ac derivative, m.  $105-6^\circ$ ; picrate, yellow, m.  $147-8^\circ$ . Contrary to an earlier statement VIII does form, in very concentrated alc. or  $\text{Et}_2\text{O}$  solution, Freundler's picrate, yellow, m.  $93-4^\circ$ . Di-Me indazole-1,3-dicarboxylate (yield, almost quant.), m.  $174-5^\circ$  (gas evolution), regenerates XI with aqueous KOH in cold  $\text{Me}_2\text{CO}$ ; distilled at  $150-80^\circ$  under 12 mm. it yields the 1-Me derivative, m.  $77-8^\circ$ , of XI. 1-Et 3-Me ester, faintly yellowish, m.  $116^\circ$ , b $_{13}$ ,  $218^\circ$  without decomposition but under atmospheric pressure it yields the 1-Et derivative of XI. 1-

Allylindazole-3-carboxylic acid, from XI and allyl bromide heated at 120-30° in sealed tubes and subsequently saponified m. 147°. Et 1-o-nitrobenzoylindazole-3-carboxylate, m. 182-3°, is not attacked by HCl in dry Et2O; attempts to prepare an isomer by treating the Ag salt of XII with O2NC6H4COCl gave a substance m. 132.5-3.5°.

IT 74152-88-8, 3-Indazolol, 2-p-tolyl- 74152-89-9,  
3-Indazolol, 2-p-anisyl-  
(and derivs.)  
RN 74152-88-8 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-2-(4-methylphenyl)- (CA INDEX NAME)



RN 74152-89-9 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-2-(4-methoxyphenyl)- (CA INDEX NAME)



L5 ANSWER 129 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1924:1709 HCAPLUS Full-text

DOCUMENT NUMBER: 18:1709

ORIGINAL REFERENCE NO.: 18:263a-i

TITLE: New cases of isomerism. II. Structural association

AUTHOR(S): Heller, Gustav; Kohler, Willi

SOURCE: Berichte der Deutschen Chemischen Gesellschaft  
[Abteilung] B: Abhandlungen (1923), 56B,  
1595-600

CODEN: BDCBAD; ISSN: 0365-9488

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

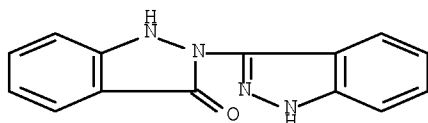
ED Entered STN: 16 Dec 2001

GI For diagram(s), see printed CA Issue.

AB cf. C. A. 11, 2778. It was shown in the earlier paper that an unexpected isomerism exists in p-lactams between the forms containing the grouping -NH.C6H4.CO- and those with the grouping -N : C6H4: C(OH)-. This was proved with the 3 pairs of isomers  $\gamma$ -ketohydroquinaldine (I) and  $\gamma$ -hydroxyquinaldine (II) (and the corresponding CO2H acids), 3-keto-2-phenyl-1,3-dihydroindazole (III) and 3-hydroxy-2-phenylindazole (IV), and isatin (V) and isatole (VI). Thode (J. prakt. Chemical 69, 92(1904)) by heating o-H2NC6H4CONHNH2 at 200° obtained a compound to which he assigned the 3-keto-1, 3-dihydroindazole structure (VII) of Fischer's o-hydrazinobenzoic anhydride, while to F.'s compound he gives the structure VIII. H. and Jacobsohn have shown, however, that F.'s compound has the structure VII (C. A. 15, 3480), and it seemed quite probable that F.'s and T.'s compds. are isomers of the type mentioned above,

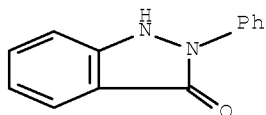
T.'s product being 3-hydroxyindazole (IX). While VII yields a di-Ac derivative, IX on cautious acetylation gives a 2-mono-Ac derivative (X) which is converted by hot AcOH into the ether XI and this with boiling HCl loses only one Ac group. With HNO<sub>2</sub> IX does not give the expected alkali-soluble mono-NO derivative but an alkali-insol. bimol. di-NO derivative (XII), whose formation may be explained by assuming that the NO group first attaches itself to the 2-N atom of IX and that the product rearranges into the 2-N derivative of VII which then reacts further with the HNO<sub>2</sub> to give XII. With P chlorides IX yields a Cl-free bimol. compound (XIII) whose composition corresponds to 2IX - H<sub>2</sub>O but whose di-Ac derivative differs from XI; XIII must therefore have a different structure, most likely XIV. Just as VI is trimol. in solvents, so also are IX and II in camphor (II in boiling Me<sub>2</sub>CO likewise). However, there is a gradual difference in this association; while VI is trimol. in PhOH, IX is predominantly bimol. (which may also be considered as incipient solvate formation) and II is monomol, and even in camphor in the more dilute solns. shows beginning dissociation. This tendency of the p-lactimes to form trimers explains the fact that both tautomeric forms can exist simultaneously; it seems that in these cases there is a new kind of association, which may be designated as structural association, as the result of which a form, in and of itself tautomeric, is stabilized. Certain solvents can in individual cases break up the polymer without rearrangement, forming solvates, and there likewise exist derivs. with a simple mol. weight which again may be associated. IX (benzoisopyrazolone), obtained in 0.3-0.4 g. yield from 2 g. o-H<sub>2</sub>N-C<sub>6</sub>H<sub>4</sub>-CONHNH<sub>2</sub> heated 4-5 hrs. at 200-10° with 1 g. quinoline, forms leafy crystals with a faint brown tinge, m. 206°, easily soluble in dilute NaOH, gives in alc. with FeCl<sub>3</sub> a dirty blue color, mol. weight in PhOH 296, in camphor 382-421. Mol. weight of II in camphor 328-468, in PhOH 185, in Me<sub>2</sub>CO 512; of VI in camphor 441. X (0.7 g. from 0.7 g. IX shaken with 4 cc. Ac<sub>2</sub>O), m. 188° (foaming), soluble in dilute NaOH, gives no color with FeCl<sub>3</sub> in alc., mol. weight in PhOH 175. Bis-N-acetylmindazolyl 3-ether (XI) (7.3 g. from 0.5 g. X boiled 0.5 hr. in AcOH), m. 190°, easily soluble in concentrated HCl, insol. in alkali, mol. weight in camphor 340, converted by heating 2 hrs. on the H<sub>2</sub>O bath with concentrated HCl into a mono-Ac derivative, m. 206°, easily soluble in alkalies and acids, gives a precipitate with NaNO<sub>2</sub> in HCl, mol. weight in camphor 300. Bisbenzoisopyrazolyl (XIII), from 0.5 g. IX boiled 5 min. with 7 cc. POCl<sub>3</sub> and 0.5 PCl<sub>5</sub>, m. 228°, soluble in AcOEt, alc. and ligroin with bluish red fluorescence, mol. weight in camphor 258, gives with hot Ac<sub>2</sub>O a compound m. 250°. 1,2-Dinitroso-3-ketodihydroindazole (XII), faintly yellow, m. 249° (decomposition), mol. weight in camphor 440, does not give the Liebermann reaction.

IT 861360-69-2P, 3(1)-Indazolone, 2-(3-indazolyl)-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 861360-69-2 HCAPLUS  
 CN 3(1)-Indazolone, 2-(3-indazolyl)- (2CI) (CA INDEX NAME)



L5 ANSWER 130 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1923:5527 HCAPLUS Full-text  
 DOCUMENT NUMBER: 17:5527

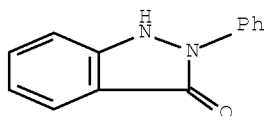
ORIGINAL REFERENCE NO.: 17:1020g-h  
 TITLE: 3-Hydroxy-2-phenylindazole  
 AUTHOR(S): Heller, Gustav  
 SOURCE: Berichte der Deutschen Chemischen Gesellschaft  
 [Abteilung] B: Abhandlungen (1922), 55B,  
 2680  
 CODEN: BDCBAD; ISSN: 0365-9488  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 ED Entered STN: 16 Dec 2001  
 AB H. does not agree with v. Auwers and Huttenes (C. A. 16, 3654) that  
 Freundler's 3-hydroxy-2-phenylindazole, m. 214°, which dissolves in alkali  
 with a bright yellow color, and H.'s isomer, m. 204°, soluble in alkali almost  
 without color (C. A. 11, 2778), are the same substance in different degrees of  
 purity.  
 IT 17049-65-9F, 3-Indazolol, 2-phenyl-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 17049-65-9 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 131 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1923:5526 HCAPLUS Full-text  
 DOCUMENT NUMBER: 17:5526  
 ORIGINAL REFERENCE NO.: 17:1019i,1020a-g  
 TITLE: The diazo reaction in the carbazole series.  
 Carbazole-3-diazoimine and -3-diazonium salts  
 AUTHOR(S): Morgan, G. T.; Read, H. N.  
 SOURCE: Journal of the Chemical Society, Transactions (1922), 121, 2709-17  
 CODEN: JCHTA3; ISSN: 0368-1645  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 ED Entered STN: 16 Dec 2001  
 GI For diagram(s), see printed CA Issue.  
 AB The outstanding features in regard to carbazole-3-diazonium salts are their  
 stability compared with the corresponding diazo derivs. of C<sub>6</sub>H<sub>6</sub>, Ph<sub>2</sub> and C<sub>10</sub>H<sub>8</sub>  
 series and their pronounced yellow color. Carbazole-3-diazonium chloride (I)  
 was prepared by adding 20% aqueous NaNO<sub>2</sub> to a thin paste of the 3-NH<sub>2</sub>.HCl  
 derivs. in dilute HCl at 8°; crystallized from H<sub>2</sub>O it forms fan-shaped  
 clusters of yellow needles with 2 mols. H<sub>2</sub>O, which became green at 98° and  
 decomposed 102°. The anhydrous salt darkened at 106-10° and decomposed  
 explosively at 153°. The chloroaurate, bright yellow, sparingly soluble  
 compound, is quite stable in the dark but darkened on exposure to light.  
 Treated with NH<sub>4</sub>OH in H<sub>2</sub>O I gives carbazole-3-diazoimine (II), bright orange-  
 red needles which, heated rapidly, exploded at 95°, but heated slowly,  
 darkened between 80-105° and did not m. 300°. It decomps. almost at once in  
 the sunlight and explodes on rubbing or by percussion or when placed near a  
 flame. It is decomposed by H<sub>2</sub>O, forming an ill defined product which does not

m. 300°. HCl regenerated I. I or II, treated with  $\beta$ -C10H7OH, gave carbazole-3-azo- $\beta$ -naphthol, reddish violet needles, m. 279° (decomposition); with resorcinol, carbazole-3- azoresorcinol, violet, m. 265-70°. Carbazole-3-azo- $\beta$ - naphthylamine, reddish brown needles, m. 260-3°. Carbazole-3-diazocyanide, NH:C12H7N2CN, by the action of KCN upon I in acid or alkaline solution, small, brick-red needles, decompose 155-60°. The slow rate of condensation with  $\beta$ -C10H7OH suggested the anti-form. Carbazole-3-diazonium nitroprus-side, amorphous light yellow precipitate which becomes green at 150° and decomp. explosively at 160°. 3-Triazacarbazole (carbazole-3-azoimide) (III), by the action of NaN3, lustrous plates, m. 176-7° (decomposition). It becomes brown on exposure to light and decomp. with considerable violence when dropped into H2SO4. Ethyl carbazole-3-azoacetoacetate, golden yellow prismatic needles, m. 193°. N-Ethylcarbazole-3-diazonium chloride, golden yellow needles with 2H2O, m. 149-50° (decomposition). It is not very sensitive to the action of light. The chloroaurate is a bright yellow compound The dichromate forms bright yellow acicular prisms and is comparatively stable.. The cyanide forms bright red needles and decomp. 148-55°. The nitroprusside seps. as bright yellow microneedles. Ethyl N-ethylcarbazole 3-azoacetoacetate, golden yellow needles, m. 125°. The action of NH4OH on the chloride gave a light brown microcryst. product, charring at 150-5°, which is probably an external diazo-oxide. Concentrated HCl gave a greenish blue indefinite product and the chloride.

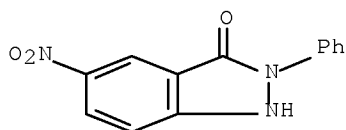
IT 17049-65-9P, 3-Indazolol, 2-phenyl-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 17049-65-9 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



L5 ANSWER 132 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1921:16476 HCAPLUS Full-text  
 DOCUMENT NUMBER: 15:16476  
 ORIGINAL REFERENCE NO.: 15:3082i,3083a-f  
 TITLE: Influence of nitro groups on the reactivity of  
 substituents in the benzene nucleus. IV. The  
 condensation of ethyl 3- and 5-nitro-2-chlorobenzoates  
 with hydrazines  
 AUTHOR(S): Kenner, James; Witham, Ernest  
 CORPORATE SOURCE: Univ. Sheffield  
 SOURCE: Journal of the Chemical Society, Transactions ( 1921), 119, 1053-8  
 CODEN: JCHTA3; ISSN: 0368-1645  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 OTHER SOURCE(S): CASREACT 15:16476  
 ED Entered STN: 16 Dec 2001  
 GI For diagram(s), see printed CA Issue.  
 AB N2H4.H2O and 2,5-Cl(O2N)C6H3CO2Et gave a mixture of 4-  
 nitrocarbethoxyphenylhydrazine, C9H11O4N3, yellow needles, m. 172° (acetate, C11H18O4N3, faintly green needles, m. 191.5°; benzaldehyde derivative, C16H15O4N3, prismatic needles, m. 165-6°), and 5-nitro-3-keto-1, 3-

dihydroindazole, C<sub>7</sub>H<sub>5</sub>O<sub>3</sub>N<sub>3</sub> (A) by acidification of the filtrate, small reddish brown aggregates of prisms, m. 273° (decomposition); acetate, C<sub>9</sub>H<sub>7</sub>O<sub>4</sub>N<sub>3</sub> small, faintly yellow prisms, m. 239°; sodium salt, dark orange-red powder; reduced with Sn and HCl, the hydrochloride of the 5-amine derivative C<sub>7</sub>H<sub>7</sub>O<sub>3</sub>N<sub>3</sub>·2HCl, was obtained as needles, m. 286° (decomposition), which become slate color on keeping. The action of PhNHNH<sub>2</sub> on 2,5-Cl(O<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>CO<sub>2</sub>Et gave 4-nitro-2-carbethoxyhydrazobenzene (B), C<sub>15</sub>H<sub>15</sub>O<sub>4</sub>N<sub>3</sub>, yellow prisms, m. 133°, which on oxidation with HgO gave 4-nitro-2-carbethoxyazobenzene, red, hexagonal plates, m. 70-1°. Boiling B with 0.5 N NaOH for 20 min. gave 5-nitro-3-keto-2-phenyl-1,3-dihydroindazole, O<sub>2</sub>NC<sub>6</sub>H<sub>3</sub>.NH.NPh.CO (C), faintly green needles, m. 270-3°. Sodium salt, dark brownish red crystalline precipitate 3-Chloro-5-nitroindazole, (I) was prepared by heating A with POCl<sub>3</sub> 5 hrs. at 120-30°; it forms faintly yellow needles, m. 210-1°. 3-Chloro-5-nitro-2-phenylindazole, C<sub>13</sub>H<sub>8</sub>O<sub>2</sub>N<sub>3</sub>Cl, as above from C, small prisms, m. 165°. 7-Nitro-3-keto-1,3-dihydroindazole (II). by the action of N<sub>2</sub>H<sub>4</sub>.H<sub>2</sub>O on 2,3-Cl(O<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>CO<sub>2</sub>Et, Cu-colored plates from glacial AcOH, m. 290°. Acetate, brown needles, m. 196-7°. Sodium salt, PhNHNH<sub>2</sub> gave 2-nitro-6-carbethoxyhydrazobenzene, C<sub>15</sub>H<sub>15</sub>O<sub>4</sub>N<sub>3</sub>, greenish yellow needles, m. 119°, which are not oxidized by HgO. 7-Nitro-3-keto-2-phenyl-1,3-dihydroindazole, C<sub>13</sub>H<sub>9</sub>O<sub>3</sub>N<sub>3</sub>, minute greenish yellow prisms, m. 185°. Sodium salt, gives a purple solution and has a tendency to sublime at 140°.

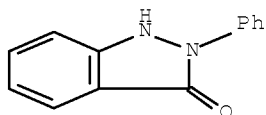
IT 861360-67-0P, 3(1)-Indazolone, 5-nitro-2-phenyl-  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 861360-67-0 HCAPLUS  
 CN 3H-Indazol-3-one, 1,2-dihydro-5-nitro-2-phenyl- (CA INDEX NAME)



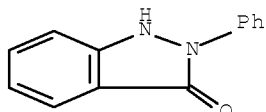
L5 ANSWER 133 OF 133 HCAPLUS COPYRIGHT 2008 ACS on STN  
 ACCESSION NUMBER: 1917:13748 HCAPLUS Full-text  
 DOCUMENT NUMBER: 11:13748  
 ORIGINAL REFERENCE NO.: 11:2778i,2779a-f  
 TITLE: New cases of isomerism  
 AUTHOR(S): Heller, Gustav  
 SOURCE: Berichte der Deutschen Chemischen Gesellschaft (1916), 49, 2757-74  
 CODEN: BDCGAS; ISSN: 0365-9496  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 OTHER SOURCE(S): CASREACT 11:13748  
 ED Entered STN: 16 Dec 2001  
 AB through J. Chemical Society 112, I, 219-20; cf. C. A. 11, 937. Desmotropism seems to be exhibited by 3-hydroxy-2-phenylindazole. On heating o-PhNHNHC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H with Ac<sub>2</sub>O a stable form (I) seps. in needles or rods, m. 204°, whose benzoate, long spikes, m. 180.5°, but solution in POCl<sub>3</sub> converts it into the labile ketonic form (II) (Freundler, Compt. rend. 143, 909(1906)), which is again transformed into the enol form by successive crystns. In addition to the lactam, and lactim forms of isatin, known in the Me derivs. (III) and (IV), the remaining alternative (V), designated "isatol," has now been isolated by shaking isatin in hot alc. with AgOAc; the N-silver salt seps. at

once as a grayish red powder soluble in C<sub>5</sub>H<sub>5</sub>N with deep bluish red color. The salt is warmed with BzCl and C<sub>6</sub>H<sub>6</sub>, the AgCl removed and the filtrate allowed to stand, whereupon (V) seps. and crystals from methylal in red prisms, m. 194.5°, insol. in Na<sub>2</sub>CO<sub>3</sub> and NH<sub>4</sub>OH, soluble in NaOH with orange-red color which becomes pale on heating, and acids precipitate ordinary isatin. Ac<sub>2</sub>O, BzCl, PhNHNH<sub>2</sub>, NaHSO<sub>3</sub>, MeI and NaNO<sub>2</sub> have no action on (V) but CH<sub>2</sub>N<sub>2</sub> gives the methyl ether, pale yellow amorphous substance. That the H atom in the 3 forms is most acidic in the imino compound is shown by the fact that isatin is soluble in NH<sub>4</sub>OH whereas (V) is not; isatin decomps. AgOAc and the  $\alpha$ -oxime is soluble in NaOH with deep blue color while the Et ether of the  $\beta$ -oxime is only phenolic and forms a yellow solution  $\alpha$ -Isatoxime, C<sub>6</sub>H<sub>4</sub>.CO.C(:NOH).NH, is conveniently prepared from NH<sub>2</sub>OH and (IV) and on warming with NaOH changes into C<sub>6</sub>H<sub>4</sub>.CO.NH.CONH. The various salts of isatin and its ethers and oximes owe their differences in color mainly to the different attachments of the metal, the N-salts being usually deeper in color than the O-salts.

IT 17049-65-9, 3-Indazolol, 2-phenyl-  
(desmotropism of, and benzoate)  
RN 17049-65-9 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)



IT 17049-65-9F, 3(1)-Indazolone, 2-phenyl-  
RL: PREP (Preparation)  
(preparation of)  
RN 17049-65-9 HCAPLUS  
CN 3H-Indazol-3-one, 1,2-dihydro-2-phenyl- (CA INDEX NAME)





## Search History

L1               STRUCTURE UPLOADED  
L2               10 SEA SSS SAM L1  
L3               248 SEA SSS FUL L1  
  
FILE 'HCAPLUS' ENTERED AT 13:06:15 ON 21 MAY 2008  
L4               144 SEA ABB=ON PLU=ON L3  
L5               133 SEA ABB=ON PLU=ON L4 AND (PRY<=2003 OR  
                  AY<=2003 OR PY<=2003)